

GOVERNMENT OF INDIA

DEPARTMENT OF ARCHAEOLOGY

**CENTRAL ARCHAEOLOGICAL
LIBRARY**

21722'

CALL No. **R913.02 J.D.A.-Ann**

D.G.A. 79



ANNUAL REPORT
OF THE
ARCHÆOLOGICAL SURVEY OF INDIA

PART I, 1914-15. *xiv*

By
SIR JOHN MARSHALL, Kt., C.I.E., Litt.D., M.A., F.S.A.,
Hon. A. R. L. B. A., Vice-President of the India Society,
Director General of Archæology in India.

21722



CALCUTTA
SUPERINTENDENT GOVERNMENT PRINTING, INDIA
1916

Price Rupees Two or Three shillings



913.02
I.D.A. Ann.

Δ. 1847

Annual Report of the Director-General of Archæology for the year 1914-15.

PART I.

Conservation.

Northern Circle: Muhammadian and British Monuments, Delhi.

DURING the year 1914-15 our expenditure on conservation works from imperial and provincial sources together, but excluding the provision made in Native States, amounted to rather less than four lakhs. Towards this sum the local Governments of the Punjab and United Provinces contributed more than a lakh, and the Government of India about a lakh and a quarter, Rs. 85,019 of which were devoted to monuments in the neighbourhood of Delhi, and the balance distributed as grants-in-aid. Of the wide reaching operations undertaken in the Fort of Shah Jahan at Delhi and described in my previous reports the more important have now been completed, our efforts during the present year being directed to the improvement of the Hayat Baksh garden, the removal of the earthwork of the Moti Masjid battery and the provision of a pair of plated copper doors, admirably executed, for the newly arranged Mughal Room. At Wazirabad, the repair of the mosque and gateway has been successfully finished, the bathing chamber in the bridge has been opened out and the débris removed from the walls, thus exposing to view the sluices and other architectural features. At the Qutb many striking improvements have been effected. The southern colonnade and gateway of the court of Altamash, which were sadly dilapidated (Plate I *a*) have been repaired, of the mosque (Plate I *b*) the original plinth has been cleared and arrangements made for the retention of the earth on higher levels by means of masonry boxing; Alau-d-din's gateway has been vastly improved by excavating the high plinth and disclosing to view the original flight of steps; the actual position of the grave in Alau-d-din's tomb has been revealed and another tomb found in the western room. Excavations have also disclosed a southern gateway and a stairway which leads to the roof of this building. At Alau-d-din's college a complete outline of the low walls has been traced, some missing portions of them made good, and the whole inner courtyard duly laid out. As funds become available, it is proposed to turf this courtyard, and to mark the position of the vanished *dalans* by shrubberies in the manner already so successfully adopted in the fort of Shah Jahan. Besides these measures, other parts of the Qutb site, including the courtyard of the sarai have been laid out and turfed, and, with a view to further extension, an extra plot of ground has been acquired near Wafati Shah's mosque and arrangements made to increase the water-supply required for the upkeep of the gardens. With a view, also, to enabling visitors who ascend the Minar to follow the line of the old city walls, boundary pillars have been erected on the walls of Lal Kot and Rai Pithora. The convenience of visitors has

been further studied by completing the erection of a *baradari* for their use. A matter of some concern at the Qutb is the safety of the great Minar. For decades past it has been known that there was a bulge in the masonry of the third storey, and a few years ago fears were entertained that the bulge might be extending. The tell-tales, however, which have been applied over the cracks, show no sign of further displacement, and it is unlikely, therefore, that the mischief is still going on. On the other hand, there is some appearance of crushing in the stone facing of the lower storey, and here another series of tell-tales has lately been applied. But, even if it proves to be a fact that the facing is suffering, there will be no reason to assume that the damage extends to the core of the structure. As in the case of the unfinished minar of Alau-d-din Khalji, this core is composed of rough rubble in lime with a veneer of Agra stone slabs on the outside and a facing of ashlar masonry of Delhi stone inside. Although, therefore, the outer stone casing may part from the rubble hearting either owing to the decay of the stone itself or to some external cause such as an earthquake, there is no reason to conclude that the hearting itself is subsiding or crumbling.

At the Purana Qila (Plate I *c*) the interior has yet to be laid out, but the removal of modern buildings has added wonderfully to the appearance of the ancient ones, and the general effect has been further improved by the repair of the surrounding walls and fortifications. At Firozabad still more extensive operations have been carried out; the whole area has been fenced in, an average distance of 60 feet being maintained between the citadel walls and the fence; the pyramidal structure supporting the Asoka column has been rendered sound; the river side *dalans* cleared and the débris from them used to form a *band* to protect the site from floods. The circular structure to the west of the column proves after excavation to be a double storied well of interesting design with colonnades disposed around the circular walls. The main gate, which lies to the west some 600 feet from the Delhi-Muttra Road, has also been cleared to its plinth level, but the archway, unfortunately, has vanished and nothing now remains but the base of the gateway and the paved courtyard to which it gave access. The mosque has been cleared, its masonry underpinned and strengthened, and the surroundings generally improved. Most of the interior of this fort has now been levelled, and it is proposed to grass the whole of it and plant clumps of trees at suitable points, so as to enhance the beauty of the ruins without interfering with the vistas. Of the interesting group of monuments of the Hauz Khas (Plate I *d*) the majority have now been rendered structurally sound, but, in order to exhibit them to full advantage, a great deal more clearance work will be necessary when funds become available. A suitable pathway will also be made from the Delhi-Qutb Road in order to render this splendid site more accessible.

Punjab.

In the Punjab, further special works have been carried out at Jahangir's Tomb, at Shahdara, which include the extensive repair, inside and outside, of the enclosure wall of the tomb, the restoration of the *baradari* on the north side, which has been treated on lines similar to those pursued in the case of its counterpart on the south, the relaying of the floor, and the fitting of terra-cotta *jalis* to the back doorways. Further attention has also been given to the historical buildings in the Lahore Fort,

particularly to the Shish Mahal, the Naulakha Burj, Diwan-i-Amm and Bari Khwabgah. In order to save the last named building from collapse certain structural additions were indispensable, and, as it is proposed to convert the building into an armoury for the collections now exhibited in the *dalans* on the south side of the Shish Mahal, its open bays have been fitted with teak doors of appropriate Mughal design. At Hissar, no further progress could be made with the clearance of the Lat-ki-Masjid, but some of the old windows and doorways which had been closed by the authorities of the Cattle Farm were reopened and minor repairs executed. At the same place too, a number of graves in the immediate vicinity of the tomb of Ali Tajir, which were subsiding and imperilling the safety of the main structure, have now been filled in, and the tomb of the four diwans, the west end of the town wall of Hissar, and the Gujari Mahal, have undergone repair. Of other special measures among Muhammadan monuments in the Punjab the most important were those started at the magnificent tomb and mosque of Tahar Khan Nahar at Sitpur in the Muzaffargarh District. These will be described in a subsequent report when the work has advanced further.

At Agra, estimates were sanctioned for improvements to the Jami Masjid including the restoration of the arcades on the east and south, but, despite the fact that the proposed alterations were fully approved by the Islam Committee, considerable delay in the execution of the work was caused by the opposition of certain shop-keepers on the site. At Fatehpur Sikri, a sum of nearly Rs. 5,000 was expended on various works including repairs to portions of the inner walls; and at the tomb of Akbar at Sikandarah some headway was made with the reconstruction of the causeway leading to the east gateway. The interest which the Hon'ble Maharajadhiraja of Burdwan has displayed for several years past in the preservation of this and other monuments at Sikandarah, is well known, and it is a pleasure to record that he has recently presented to the tomb of the Emperor two handsome embroidered coverlets as well as a beautiful brass lamp similar in design to that presented to the Taj Mahal by Lord Curzon. The Maharaja has also generously offered a contribution of Rs. 1,500 towards the cost of completing the repair of the east gateway. Other monuments near Agra which have come in for special repairs are the tombs of Maryam and Itimadu-d-Daulah. In the Roman Catholic Cemetery two tablets were erected in the Martyr's Chapel to record the names of those buried therein.

At Chunar the tomb of Itfikhār Khan received particular attention, its broken chhajjas, brackets and lintels being restored, destructive vegetation removed and its immediate surroundings cleared. At Jaunpur, besides the ordinary repairs to a large number of historical monuments a house abutting on to the Rauza of Firoz Shah was acquired and dismantled.

Of the undertakings among the Hindu and Buddhist monuments in the Northern Circle the most important related to the rock-cut temple at Masrur in the Kangra District of the Punjab (Plate II). Here, new quarters for the pujari have now been constructed clear of the site and the eastern face of the temple has been cleared of earth and underpinned. In the course of the excavations various images of Siva Surya and Indra came to light in the niches of the shrines and many

United Provinces.

Northern Circle:
Hindu and
Buddhist
monuments.

fine architectural fragments and other detached images were also recovered; but as the digging proceeded towards the north-east it unfortunately revealed serious fractures and displacements in the rock, and the most that can now be done with the displaced masses is to preserve them in their present position. Another noteworthy enterprise which has received the approval of the Local Government is the preservation of the famous Manikyala Stupa in the Rawalpindi District, long-known in the country side as the tomb of Bucephalus. The measures contemplated are to be confined to replacing certain missing portions of the berm and the dome in order to secure their stability and to clearing up and draining the surroundings of the stupa. The spurious sort of restoration which was effected in 1891 and which did so much to disfigure the beauty of the monument will, it need hardly be said, be religiously avoided.

In the United Provinces the only undertaking that deserves particular mention has been the preservation of the Buddhist remains at Sarnath brought to light during successive excavations in the course of the last decade. Here too, an estimate has been prepared for the removal of the offending cap of cement concrete with which the top of the Dhamekh Stupa was protected some years ago.

Frontier Circle.

In the Frontier Circle the highly interesting group of half ruined temples and other remains at Bilot (Plate III) were carefully overhauled and a memorandum on their preservation submitted to Government by Mr. H. Hargreaves, who was placed on special deputation for this purpose. These remains are situated on a well-defined plateau of the Khasor range some 350 feet above the westernmost branch of the Indus. The plateau, which is roughly square in plan and measures about 600 yards in each direction, is defended by a single line of fortifications strengthened by bastions at regular intervals, the bastions as well as the curtain of wall between them being constructed of carefully dressed and uniform ashlar masonry without any trace of mortar. Inside the fortifications are the ruins of several mediæval dwellings and Hindu shrines which in many of their features recall the temples at Amb, Ketas and Nandna in the Salt Range, though their proportions are more ample and their decorative carvings decidedly more graceful. The most characteristic of the structural features of these shrines are their high vaulted porches, domical roofs surmounted by richly decorated Sikharas, corbelled squinches, and the use of remarkably hard mortar to bind the masonry together. The most striking of their decorative elements are the cusped or cinquefoil arches (Plate III *b*), tiers of richly carved pilasters, dentil cornices, foliated medallions and 'horse-shoe' and 'amalaka' motifs. As to the date of these buildings Mr. Hargreaves observes that on historical grounds they have been assigned to a period anterior to the conquest of the Punjab by Mahmud of Ghazni (1001-1030 A. D.), but that architectural considerations and particularly the use of mortar, the form of the dome, and the radiating arches point to a later era. The photograph on Plate IV *a* is an illustration of a new roof over Court T20 at Takht-i-Bahi, which has been erected in accordance with Sir Aurel Stein's suggestions for the protection of the several valuable stupas adorned with delicate reliefs. The roof is open to some objection on the score of its frankly modern character but the area to be covered was a large one and the Military Works Department found it impracticable to erect anything

in the style of the ancient buildings themselves except at a wholly disproportionate cost.

Of the monuments that have been under repair in the Bengal Presidency I shall select only two for special mention. One of these is the Gunmant Mosque at Gaur (Plate IV *b*) a city of unknown antiquity whose recorded history begins with the Muhammadan conquest in 1198, from about which time it was for three centuries the seat of the Muhammadan government of Bengal. Here an extensive campaign of conservation was carried to completion a few years ago, and, thanks largely to the exceptional care bestowed upon it by Munshi Abid Ali Khan, a sub-divisional officer of the Public Works Department, the main group of monuments was put into an admirable state of repair. In this group, however, the Gunmant mosque was not included, and it was not until 1912 that it was decided to bring it on to the list of buildings conserved and maintained by Government, and not until the last twelve months that its repair could be brought to a finish. The mosque is an imposing and solidly built monument having a barrel-vaulted central bay supported on four piers with four bays on either side, roofed with twelve domes on each side supported on columns. Nine of these domes to the north of the central bay have collapsed and much of the old stone facing has been wantonly removed from the walls. The conservation measures recommended included the clearance of jungle, the removal of rubbish resulting from the collapse of the domes, the filling of cracks and holes, the securing of all hanging bits of masonry, and the rendering water-tight of all existing domes as well as the broken tops of walls where the domes had fallen. Two flying buttresses are also to be inserted to take the thrust of certain arches on the north. From an aesthetic point of view such measures, of course, are to be deprecated but in this case, as in the case of many other buildings that have suffered from long neglect, no alternative course has been practicable.

Eastern Circle.

The other monument which deserves particular notice is at Vishnupur in the Bankura District. Here stand a remarkable series of temples constructed over a period of very many years by the successive princes of the Vishnupur Raj, a family said to have been founded in the eighth century A.D., and to have once been one of the most important dynasties in Bengal. Most of the temples, which were erected in the seventeenth century, are of the normal Bengal type, but they show a considerable variety in detail, and altogether constitute not only an important but a pleasing group, as they are for the most part lavishly adorned with the sculptured brick-work which is so marked a feature of temple architecture in Bengal. A further remarkable feature of these buildings is that they are prevailingly inscribed and definitely dated, and that, too, in a special local era peculiar to the place. This adds alike to their interest and to their value, as it enables us to classify the temples chronologically with much precision. The oldest in the neighbourhood, however, are two laterite shrines outside Vishnupur itself, near a small nala at the village of Dihar. Here the architectural type is distinctly more primitive than in the main group, and for this reason, if for no other, they are of special interest in this locality. One of the two was found in 1911 to be in fairly good condition. The other, which rises sheer from the edge of the water course, had been very seriously undermined by the action of the water. The platform on which the temple stands had become badly

cracked and the temple itself was in imminent danger of collapsing into the stream. The matter was first brought to the notice of Government by Dr. Spooner but Mr. Blakiston subsequently drew up detailed instructions for the conservation of the building, and, thanks to Mr. Gourlay, the Private Secretary to His Excellency the Governor of Bengal, funds were provided for this specially urgent work at a time when they would not have been available in the ordinary course.

Two of the chief centres of archaeological interest in Bihar are Bhuvaneshwar and Sassaram. The former site exhibits a series of Hindu temples of a richness and beauty unequalled elsewhere in Eastern India. Here, as at Gaur, much conservation work has been carried out in the past, and the majority of the more important shrines were put in order some time ago. The beautiful Chitrakarini temple, however, was found to be urgently in need of repairs in 1911, and these have recently been effected. The plinth of the Jagamohan or porch had been badly broken away, and the superstructure, which was in anything but good condition, was in danger of collapsing altogether. The repairs aimed more particularly at making this portion of the temple structurally sound.

Sassaram, in the Shahabad District, is famous for monuments of a radically different nature, for here are located the stately and noble tombs of the Pathan Emperor Sher Shah (1539-1545) and his father, Hasan Sur Shah. The former, which is admittedly one of the grandest monuments in Northern India, is in the later Pathan style, but its grandeur has been materially enhanced by placing it, as the Hindus often placed their temples, in the centre of a spacious tank, in whose placid surface its stately fabric is picturesquely mirrored. Originally the tomb was approached by a bridge which crossed the encircling water; but this bridge gave way many years ago, and now the only access to the monument is by a causeway. This causeway and the steps leading from it to the tomb itself had fallen into disrepair, and in the year under review the causeway was repaired and the steps rebuilt; and it is understood that the Municipality, with the help of the Local Government, is proposing to take in hand the repair of the tank as well, cleaning it up generally, and providing a much needed drain around its edge.

The other great monument at Sassaram, the tomb of Hasan Sur Shah, is little inferior to that of his greater son; but there the monument stands in a simple compound, and the absence of the surrounding tank makes an immense difference in the effectiveness of the tomb itself. Moreover, in recent years the wall around this compound had been suffered to decay to some extent, and a whole bevy of huts had sprung into being along its outer face, making the surroundings of the noble monument unsightly and unsuitable in every way (Plate V *a*). Thanks to a generous grant from the Government of Bihar and Orissa, these huts have been acquired and razed, repairs have been carried out to the compound wall and to the tomb itself, and a striking improvement has been effected to the appearance of the monument (Plate V *b*). This is most gratifying to record; for the tombs of Hasan Sur Shah and his son are two of the most important monuments in this Province.

In the Native States of Central India and Rajputana, as well as in His Highness the Nizam's Dominions, conservation work has recently received a great stimulus. At Sanchi in Bhopal State where I have personally been conducting operations on

behalf of Her Highness the Begum, the work of exploration is now finished, the last of the buildings to be exhumed during the past year being an early mediæval shrine and monastery on the summit of the eastern plateau. There still remain, however, many measures of repair to be executed, if the monuments uncovered are to be preserved to posterity in a manner worthy of their unique interest and beauty; and for the accomplishment of these measures at least two seasons more of steady labour will be required. Of the monuments of which the conservation has been completed during the past year two illustrations are exhibited on Plate VI. The upper one is the stupa in which General Cunningham found the body relics of Mahamogalana and Sariputra, but which unfortunately he made no attempt whatever to preserve. A photograph of this building in process of reconstruction was figured in my administrative report of last year, and I there explained the reasons which had induced me, in this particular case, to resort to a larger measure of restoration than I should otherwise have essayed. Now that the work of reconstruction is complete, I believe that everyone, who remembers the former ugly heap of ruins, will endorse whole-heartedly the course that has been pursued and gratefully acknowledge the added beauty that has been given to the carved gateway by the restoration of its appropriate setting. As a fact, the restoration has been very limited; for beneath the heaps of débris the body of the stupa up to a height of some six feet above the terrace was still intact, and reconstruction, therefore, involved nothing more than the rebuilding of the summit of the dome and the replacing and completion of the fragmentary balustrades and crowning umbrella, which were found lying at the foot of the monument. No attempt, needless to say, has been made to carve any of the new members which it has been found necessary to insert in the balustrades. The lower photograph on Plate VI depicts the apsidal Temple 18 as it now stands cleared of débris and with its classic-looking columns and architraves once more erect and secure. The task of setting up these columns was one of no small difficulty—a difficulty which was much increased owing to the impossibility of procuring adequate appliances at Sanchi except at a wholly disproportionate cost. In the first place it was essential to have an exceptionally strong scaffolding, and, as timbers could not be obtained, I had recourse to walls of rough rubble in lime strengthened with hoop iron. The walls were erected in two lines, parallel with one another, inside and outside the colonnade, with short cross walls between the columns; and, in order to provide access to the base of the latter, low, semi-circular arches were constructed opposite to each at the foot of both the inner and outer walls. With this stout and solid scaffolding forming a well, as it were, around each of the columns, the second step was to raise the architraves with screw jacks and support them on balk timbers, then to lift the capitals and jack back the columns into the perpendicular. Next the foundations of the columns were grouted with Portland cement, steel chisels were driven in under their base, and grout forced under pressure into the open crevices. Capitals and architraves were afterwards lowered and reset in their correct position, and securely clamped together with copper clamps imbedded in lead. Other necessary measures that were also carried out at Sanchi were the conservation of monasteries 36, 37 and 38 and of several other smaller monuments on the site, the reconstruction of the long

retaining wall between the Central and Eastern areas, the levelling and drainage of a large part of the Eastern and Southern areas, and the renovation of the old wall which encloses the whole enclave and which is now as indispensable for the safety of the monuments as it appears to have been in the later mediæval age.

The Kandaria Mahadev temple illustrated on Plate VII *a* is one of a well-known group of such edifices at Khajuraho which comprises in its number some of the most exquisite examples of Indo-Aryan architecture in the length and breadth of India, the only group which in any way surpasses it being that of Bhuvaneshvar in Orissa. The majority of these temples were carefully overhauled and put in a thorough state of repair a few years ago at the expense of the Imperial Government, but there are still a few structures, notably, the Nilkantha Mahadeva and the Jatkari, awaiting conservation. These have now been critically examined by Mr. J. A. Page, the Assistant Superintendent in Western India, and a memorandum on their repair submitted to the Darbar, which will, it is hoped, carry out the necessary measures at an early date. Other Native States in Central India and Rajputana in which archæological activity has been displayed during the year under review are:—Indore State, where some further clearance has been done at the Caves of Dhamnar; Dhar State, where a variety of repairs have been executed among the monuments of Dhar and Mandu and a detailed programme elaborated for further operations; Jhalawar, where the Chandravati temple has received attention; and Bharatpur, where the Usa mandir, the Jhajri, the tomb of Gulab Khan and the Bazna Gumbaz, all at Bayana, have been conserved in accordance with the recommendations that I had previously made. In the Baroda State also further care has been bestowed upon the exquisite though much-ruined temple of Suryanarayana at Modhera (Plate VII *b*) and steps are now being taken to do all that is necessary in the way of underpinning and resetting its displaced masonry.

The first two photographs on Plate VIII, which illustrate the restoration of a carved marble architrave in one of the Dilwara temples at Mount Abu, are reproduced here as an example, not of what should be done in such cases of dilapidation, but of what should be avoided. A single glance at the new work, which has been put in by the temple authorities, will suffice for the reader to see how far removed it is in style and in plastic feeling from the ancient sculpture; though even if this modern imitation were fully up to the standard of the original, it would still fail to justify the temple authorities in essaying so spurious a restoration. No doubt, the Jains are anxious to make these world-famous shrines as perfect and as finished as possible in every detail, and one can sympathise with them in the difficulties with which the preservation of the old work must necessarily confront them; nor must it be forgotten that they are primarily concerned with the maintenance of these temples as living monuments of their faith rather than as objects of beauty which it is their duty to preserve unimpaired for posterity. What, however, the Jains do not yet realise is that by renovating their temples in this way they are gradually destroying their authenticity and their interest, and that, if in any case restoration is unavoidable, it is far better for the new work to be severely plain than adorned with lifeless imitations of the old reliefs.

The succeeding illustration on Plate VIII is of the Saiva temple of Dodda Basavanna at Dambal in the Dharwar District of the Bombay Presidency — a monument in the later Chalukyan style and of exceptional architectural merit, which has the distinction of possessing perhaps the richest and most elaborate carvings found in any edifice in Western India. Unfortunately, the temple has suffered much dilapidation in the past, and on a recent examination its fabric was found to be in a parlous condition, the main cause of the mischief being one which is common to many Indian buildings, namely, the loose and unbonded construction of the walls, the outer and inner faces of which, detached as they are from the core, must inevitably tend to bulge and collapse when the percolation of water has started a movement in the rubble hearting of the wall. Before the repair of these crumbling walls can be effectively carried out, it is necessary to determine whether their foundations, which have subsided a little, are liable to any further settlement, and accordingly temporary buttressing is being provided to support the weaker parts of the fabric through two monsoons, while adequate tests are applied. Of the important groups of temples at Aihole and Pattadakal in the neighbouring district of Bijapur and of the extensive campaign of repair that is now being prosecuted among them, I gave some account in my last year's report; here I need only remark that further steady progress has continued to be made at both places and that the buildings are now presenting a very orderly and cared for appearance, their sites cleared of debris and levelled, and neat enclosure walls erected round them for protection. Other works of a special nature in the Bombay Presidency related to the temple at Ambarnath in the Thana District, where supports for the main fabric had to be inserted and repairs executed to the compound wall; to the caves at Karle, where the disintegrating rock had to be sustained by rolled steel joists; to the Asar Mahal at Bijapur, the repair of which, described in my last year's report, has now been completed; to the hill fort of Satara, where the approach road has been reconstructed; and to Isa Khan's Zenana and the Jami Masjid at Tatta, where various necessary improvements have been effected.

Bombay
Presidency.

The two elaborately decorated carved and well-proportioned façades illustrated in Plate IX are fine examples of what the woodcarvers of Ahmedabad can achieve in the decoration of house fronts. Such façades are now much rarer than they used to be in Ahmedabad, many of them having been exported abroad and particularly to America, where collectors have been only too quick to appreciate their artistic value. With a view to preserving to India the best of those that remain, the Assistant Superintendent in the Western Circle was instructed to make a careful examination of numerous private houses in Ahmedabad and to select from their number the four most perfect and beautiful specimens (including the house of Anancharam Gokuldas illustrated on Plate IX). Efforts are now being made to bring these houses under the protection of the Ancient Monuments Act.

From Bombay I pass eastward into Hyderabad territory. Here a special department for archaeology was created by His Highness the Nizam's Government in April, 1914, and the new Superintendent at once set about systematically examining the more important monuments which were known to be in need of attention, and drawing up careful notes on the measures to be taken for their repair.

Hyderabad State.

Among the monuments thus overhauled were the caves of Pitalkhora, Ghatotkach, Aurangabad, Ellora and Ajanta; the temples at Anwa, Ittagi, Kukkanur, Anagundi, Kulpak, Hanamkonda and Bodhan; the forts and subsidiary buildings at Warangal, Qandhar, Naldrug and Daulatabad; and numerous other structures, mainly of the Muhammadan epoch, at Hyderabad, Khuldabad and Gulbarga. Two of these monuments, namely, the temple at Anwa and the water-dam of the Naldrug Fort, are illustrated in Plate X. The former, which has many features in common with the temple of Surya at Modhera (Plate VII *b*), is but a shadow of its former self, having lost both the spire over its sanctum and all the external decorations over the roof of its porch; yet, in spite of these dilapidations, it still remains a monument of great beauty and interest, its fine proportions, its bold and lofty plinth, its elaborate sculptures, and its ample dome supported on richly carved pillars being unsurpassed in any structure of the kind in this part of the country. The picturesque water-dam at Naldrug on the Bori river is a particularly fine example of such works and of imposing proportions. The existing fortifications of Naldrug were constructed by the Bahmani dynasty, but in 1482 the city passed into the hands of the Adil Shahis, and it was Ali Adil Shah who in 1558 constructed the dam in order to keep the garrison supplied with water.

On the occasion of the Superintendent's visit to Ajanta both Mr. A. Hydari, Home Secretary to His Highness the Nizam's Government, and myself were present, and we thus had a good opportunity of discussing together on the spot the problems and difficulties involved in the preservation of the invaluable frescoes in these caves and of coming to a definite conclusion as to the best course to be pursued. Put briefly, the decisions at which we arrived were: first, that owing to the pulverous and friable state of the frescoes, any attempt to transfer them from the walls of the caves to a museum would be disastrous; secondly, that the two most potent causes of deterioration in the paintings had been bats and moisture; that the caves could be rid entirely of the former by the erection of additional screens and improvements to the existing ones, and that the dampness could be reduced to a minimum, if not altogether averted, by diverting the flow of water from the hills above the caves, by filling in interstices and crevices in the rocks and by providing suitable gutters and drains to carry off any leakage that might still occur. Thirdly, that in places where the alternate dryness and moisture had resulted in the expansion and contraction of the frescoes and caused portions of them to separate from the rock behind, some kind of cement was needed to refix them to their bed. Though the preparation of a suitable cement may appear to be a simple matter, it is in reality one of exceptional difficulty, the problem being to find a cement which can be used in the form of a thin grout, which will not expand in setting, which will exercise no deleterious effect upon the colours of the paintings, and which will withstand a temperature of 110° Fahrenheit. Since applying myself to the problem I have consulted several of the foremost chemists and highest experts in such matters in Europe, but so far I have failed to find a solution to the problem. Until it is found, any attempt to render the frescoes more secure will have to be postponed; but meanwhile the other measures indicated above will be carried out.

In the Southern Presidency, Vijayanagar continued, as in previous years, to be

the chief centre of activity. Here the Ramachandra temple has been beautified by the removal of the clumsy modern pillars and buttresses, which used to disfigure the entrances and porches and which effectually concealed many of the excellent carvings on the outer enclosure wall, and by repairing both entrances and walls on neat and scientific lines. Both of the lofty water towers in the Zenana enclave have been repaired and protected against further decay, and repairs are in progress to the ruined tower over the entrance gateway of the Pattabhirama temple. A new road also to the Vitthala temple is under construction, which will enable visitors to drive direct to that famous monument from the traveller's rest-house at Kamalapuram. Other important monuments in the Presidency which have come in for repairs of a special character are the forts at Madakasira, Sankaridrug, Udayagiri, Ranjangudi, Gingee and Tanjore; the tombs of the Jain priests at Mudabidri; the Royal Mosque at Rajahmundry; the temple known as "Rhima's ratha" at Mahabalipuram, of which the conservation is now complete, and various other temples at Lepakshi, Gorantla, Tambrahalli, Joti, Namakkal, Melpadi, in the Pushpagiri hills, and at Oragadam. The last mentioned, which is known as the Vadamallisvara temple, is illustrated and its history and architectural significance are discussed at length by Mr. Longhurst in his provincial report. In his description of the repairs, however, which this building has recently undergone, Mr. Longhurst has omitted to mention that the temple is still in use for religious purposes and that, the temple authorities having decided to restore it in any case, the most that the Archaeological Department could do was to ensure the restoration being correct. I feel constrained to lay some emphasis on this point, because restoration of the kind that has been carried out here is contrary to the principles laid down by the Department, and, had the building been Government property or under Government control, it would never have been sanctioned.

Of the two edifices illustrated in Plate XI, the Mèdaw Kyaung—the first of the two—was built in 1843 by the chief queen of Shwebo Min and dedicated as the residence of U. Nyeya, who was then Thathanabaing or Buddhist archbishop. Thanks to the power and wealth of the foundress of the monastery and to the exalted status of the occupant for whom it was destined, neither money nor skill was spared in its adornment, and, in spite of the ravages of time and neglect, it is still a gorgeous example of what the most refined type of Burmese art could achieve in the middle of the last century. This monastery was selected by me for preservation more than ten years ago, but for lack of funds little has been done to it since and the time has come when its conservation can no longer be postponed. An estimate for this work is now under preparation, and it is hoped that the execution of it will be included in the next year's programme. The second illustration is of the Myadaung Kyaung or Queen's Monastery, which is still one of the sights of Mandalay. It was completed in a hurry in November 1885 by Supayalat, the Queen of Thibaw, just as the British troops were on their way to the palace. The structure has weathered badly and various repairs are necessary, including the jacking up of sunken posts, the renewal of wooden flooring and the repair of the *pyatthat* over the chapel. Other historic monuments in Burma, that have been the objects of particular attention during the year under review are the Royal Tomb,

Burma.

the Palace, and the Salin Monastery in Mandalay, the 'Tupayon Pagoda at Sagaing and the Seinnyet Ama Temple and Eastern Petleik Pagoda at Pagan.

Ancient
Monuments Act.

The number of monuments brought under the operations of the Ancient Monuments Act (VII of 1904) still goes on rapidly increasing, as many as 224—chiefly belonging to the Western and Northern Circles, having been declared protected during the year.

In India the purpose of this Act is now well understood and its application in the interest of the monuments as well as of the owners themselves is almost always welcomed by the latter. In Burma this is not the case, and it recently happened that the local elders in the Bassein and Henzada Districts objected to the action of the Local Government in notifying as protected some of the pagodas in their custody. Apparently, they were labouring under the false idea that the Government notification would have the effect of debarring them from executing necessary repairs to, or continuing their customary religious observances in, the sacred precincts; and in order to remove this misconception the Local Government thought it desirable to issue a press note explaining the scope and purpose of the Act. So far as religious buildings, like the pagodas referred to, are concerned, one of the main objects of declaring them 'protected' is to prevent them being damaged or defaced by persons other than the owners. With the rights of the owners themselves the Government has taken no powers under the Act to interfere.

Listing of
Monuments and
Surveying.

In the matter of surveying, also, and in the listing of monuments very good progress has been made. In Bihar and Orissa, the temporary staff of photographers appointed for this purpose have worked well and industriously, taking notes on 1,112 monuments and preparing photographs of 347 monuments in the Patna and Gaya Districts. Owing to the absence of the Local Superintendent on leave during the summer, the publication of the Tirhut list was unavoidably postponed, but it is expected to be published at an early date. In the same circle, the copying of the frescoes in the Jogimara Cave in Sirguja State was brought to completion. These copies which have been very carefully executed under the supervision of Mr. Blakiston, make it clear that the frescoes have been executed by two different hands. The original work, which dates from about the 1st century B. C., must have possessed considerable merit, some of the figures, specially the *makaras* and other monsters, still showing considerable vigour and decision in their outlines though they have suffered much from the colours crudely daubed over them, when the paintings were subsequently restored—probably in the later middle ages.

In the Delhi province 248 monuments have been surveyed and 169 inscriptions copied, of which a large number were previously unknown. In the Frontier Circle all the monuments in the Peshawar District to which any reference is made in the records of the Chinese pilgrims or other literary works have been listed, and the list is now being extended to other remains in the district.

Of the valuable survey work which has been done by Mr. Yazdani in His Highness the Nizam's Dominions I have already spoken, and the brilliant discoveries made by Mr. Garde in Gwalior State will presently be described in the section of this report relating to exploration. In the Southern Circle a new list of monuments is under preparation, and in Burma the list of ancient remains in the Arakan Division,

which was prepared in 1890 by the late Dr. Forchhammer, has been revised and brought up to date.

As the second part of this report will contain a detailed narrative of my excavations at Taxila, the account which I shall give of them here will be a very brief one. Among the larger monuments brought to light during the year the most striking is a stupa of imposing dimensions which occupies a commanding position on a plateau on the northern side of the Hatial ridge. This is the stupa which Hiuen Tsang describes as being more than 100 feet high and which he says was erected to commemorate the spot where Asoka's son Kunala had his eyes put out through the guile of his wicked step-mother, Tishyarakshita. The blind, he adds, came here to pray and many had their prayers answered by the restoration of their sight. A view of the stupa before excavation is presented on Plate XII *a*, and another of it, after excavation, in the succeeding photograph on the same plate. As will be seen from the latter, it rested on a lofty rectangular base divided into three tiers and provided with a projecting flight of steps at its northern end. The base measures over 63 feet, from east to west, and over 105 feet, exclusive of the steps, from north to south. The core is of rough rubble; the facing of lime stone in the semi-ashlar style with kanjur blocks inserted for mouldings and other ornamental features. Adorning the lowest tier is a series of Corinthian pilasters resting on a torus and scotia moulding and surmounted by a dentil cornice with Hindu brackets of the "notched" variety intervening between the capitals and cornice. The second tier was plain save for a coating of lime plaster, beautified perhaps like the rest of the monument with colour or gilding. The third tier was relieved by a massive base moulding with pilasters set apparently at each of the salient and re-entering angles, and no doubt also by an entablature similar to that on the lowest tier. As to the drum and dome of the stupa which this base supported, the architectural fragments found in the débris leave little room for doubt that they were approximately of the same form and decorated in the same way, with tier upon tier of Corinthian pilasters and cornices, as the great Bhalar Stupa on the opposite side of the Haro valley, which is contemporary with the Kunala Stupa and in other respects remarkably similar to it. As it now stands, the Kunala Stupa as well as the monastery which I have also partially uncovered at its side dates from about the third century A. D. Prior to this, however, there had existed on the same site a smaller memorial stupa which can be seen in the photo on Plate XII thrusting out its head on the west side of the larger edifice. This earlier stupa, which is a little short of 10 feet high and complete save for the crowning umbrella, was built probably in the first century A. D. on the summit of a small rocky eminence and then, when the spot perhaps had acquired greater sanctity, it was enclosed *en masse* in the body of the larger structure.

A feature which gives remarkable interest to the Kunala Stupa and which has not, so far as I am aware, been observed in any other structure in this country, is the delicate concave curvature of the sides of the building which at the centre recede about 3" from the straight. In Greek temple architecture, it was a common practice, in order to correct certain optical illusions, to give "entasis" to the shafts of the columns, as well as a slight curve to the stylobate and entablature. In the

Exploration:
Taxila.

case of the Kunala Stupa I suggest that the architect was acquainted with this Hellenic principle of entasis, but, that not understanding it correctly, he gave a concave instead of a convex curvature to the base lines and so increased instead of reducing the optical illusion. In connexion with this question of Hellenic influence, which obtrudes itself so frequently at Taxila, I might mention that the Ionic columns of the temple at Jandial are not only Greek in form but, in accordance with the usual Greek principle, are constructed of drums superimposed one upon the other and fitted together by rotating each in turn on wooden dowels set in the centre of the drums, the raised drafts at the edge being thus ground down until the joint between them was scarcely perceptible.

In the lower city of Sirkap the excavation of the palace was continued and several more buildings were cleared or partially cleared on the west side of the High Street. The principle on which these buildings are planned is in practically every case the same: it is that of a rectangular court with chambers on every side, the court and chambers being repeated two, three, four or more times according to the amount of accommodation required. On one peculiar feature of these houses in Taxila I have already remarked in a previous report, namely, that in many of them the chambers of the lowest storey were in the nature of cellars reached apparently through trap doors in the roofs. Sir Aurel Stein tells me that such underground cellars are also found in the ancient houses of Khotan, where they appear to have been used as depositories for the refuse thrown from the upper floor. In the case of the Taxila houses no such refuse has been found, and we must assume, therefore, that they served as store rooms and *takhhanas* for living purposes. Another singular feature of these Taxila houses is that the number of chambers provided in them is far too great for the needs of an ordinary household. This is a feature which is common to every building that has hitherto been unearthed in the city and at present it looks as if several families must have lived together in one block just as the Romans did in their *insulae* and as the poorer classes still do in many towns of Italy. It is too early as yet, however, to draw any certain conclusion on the point; for it may prove that, when other parts of Sirkap and particularly the back streets—come to be explored, a class of smaller dwelling houses will be brought to light, and we should then be left to infer that these larger buildings were the residences either of the wealthier inhabitants or perhaps of professors and their pupils, who must have been numerous in this once famous University town.

Of minor antiquities from the newly excavated houses a considerable collection was recovered during the year, including a large variety of earthenware vessels and toys; iron vessels and utensils, among which are folding chairs, tripod stands, horses' bits, keys, sickles, swords, daggers, shield-bosses, and arrow-heads; bronze and copper goblets, lamps, caskets, scent bottles, ornamental pins, bells, finger-rings, coins and medals; and stone bowls and relic caskets. Among the specimens of copper and bronze objects reproduced in Plate XIII, figure *a* is a copper lamp, figures *b* and *d* are probably toilet-boxes, and figure *c* is a singularly beautiful specimen of a bronze goblet, made all the more beautiful by the exquisite blue patina with which it is encrusted. Besides these antiquities I was fortunate in discovering, also in Sirkap, the first Aramaic inscription that India has yet produced. This

interesting record is carved on a much worn and broken piece of grey white marble which was found built into the northern wall of chamber *a*¹ in block F. Unfortunately, the inscription is only a fragment and the difficulty of deciphering it is increased by the strange similarity of several of the letters as well as by the lack of other Aramaic epigraphs in India which might help in distinguishing their forms. In spite, however, of some uncertainties, its general purport has been made out by Professor L. D. Barnett and Dr. A. Cowley and published by them in the Journal of the Royal Asiatic Society¹. Apart from its contents this record, which dates probably from the early half of the fourth century B. C., is of considerable value in connexion with the history of the Kharoshthi alphabet. "Taxila" writes Dr. Cowley "was the chief city of the Kharoshthi district, and, as Bühler says (Vienna Or. Journ., 1895, p. 45), it is here that the Kharoshthi alphabet must have originated. The view that Aramaic was officially used by the Achæmenians (first suggested by Clermont Ganneau), that after their conquest of Northern India about 500 B. C. it became current there, and that Kharoshthi was derived from it in this way is thus being gradually confirmed. The papyri have shown that the language was officially used by the Persian Government, and no doubt when (if ever) excavation is possible on suitable sites in Persia itself, further evidence will be found. As a matter of fact, however, Aramaic as a *lingua franca* was not *introduced* by the Persian Empire. It was used in much earlier times not for monumental or literary purposes so far east, but as a trade language side by side with the impossible cuneiform system, as is shown by the dockets on Babylonian tablets. Under Assurbanipal (from 668 B. C.) an Aramæan copyist was officially employed as well as an Assyrian (Hommel, *Geogr.* i, p. 191 seg.). By the Persians this was further extended whether or not we believe with Hommel that the O. P. cuneiform is derived from some form of "Phœnician Aramaic" alphabet. "The use of cuneiform for writing Persian did not last long, and after the fall of the empire when we meet with written Persian it is in various forms of the Aramaic character. It is not difficult to see how the alphabet would eventually reach India. This inscription is the first proof that it did get there. Its date is nearly that of the first specimen of Kharoshthi, and it thus forms a sound basis for comparing the two systems of writing."

At the Dharmarajika Stupa the past season was mainly devoted to clearing the group of remains on the western side of the Great Stupa and a number of small stupas and chapels in other parts of the site. Of the small round stupas of the Saka-Pahlava period set in a ring round the central edifice four more have now come to light, in two of which I was fortunate enough to find the relic chambers intact. In both cases the caskets were, as usual, of steatite and enclosed smaller reliquaries of gold and silver together with a large assortment of precious or semi-precious gems and, in one case, a rare coin of Azes I. The presence of this coin is of interest as confirming the conclusion at which I had already arrived on other grounds regarding the age of these small circular memorials, though taken by itself a single coin found in a given monument can seldom be adduced as evidence of anything more than the *terminus post quem* that particular monument was erected. A striking illustration of this is afforded by a find which I made in a small square

¹ 1915, pp. 340-7.

s tupa to the N.-N.-E. of the central edifice. As shown by the style of its masonry as well as by its situation over the ruins of another structure, this stupa is evidently of a late date: yet along with a casket of Gandhara stone and a handsome pendant of rock crystal in the shape of a lion and other objects the deposit also included a coin of Azes I. In this case, therefore, we must assume either that the relics had been transferred from an earlier memorial, or that the coin had been in circulation for some two or more centuries before it was deposited with the relics. Another illustration is supplied by a hoard of 355 coins, which I found in a hollow block of *kanjur* stone amid the débris on the western side of the Great Stupa. This hoard, which appears to have been a gift to the Dharmarajika, comprised coins of Azes II, Soter Megas, Huvishka, Vasudeva and some Sasanian and Huna kings, besides a number of hitherto unknown coins of crude and irregular fabric, and it indicates, like many another hoard that has been found in India, that some of the coins were still in use several centuries after they had been issued.

Of the newly discovered chapels round the procession path of the Great Stupa the most interesting perhaps is one on the western side, which dates from the second century A. D. and is adorned with stucco reliefs portraying various scenes from the life of the Buddha. In point of style these reliefs are identical with the sculptures of the Gandhara school, and they thus provide fresh and reliable evidence as to the date of the latter. In another chapel to the N. W. of the Great Stupa were the remains of a *kachcha* structure which yielded a large number of clay sealings impressed with the Buddhist formula: *Ye dharma hetu prabhava*, etc., in characters of the Gupta age. Other noteworthy finds were a vase containing 15 copper coins of Shapur II in a stupa in the Eastern part of the site; relic caskets of steatite and silver and gold in another memorial in the same area; an earthen pot containing five gold coins of the later Kushans, an earring of solid gold and pearl and other ornaments; and a large number of stucco figures and stone reliefs from the various chapels.

Pataliputra.

Of his excavations at Pataliputra, for the continuance of which we are indebted to the generosity of Mr. Ratan Tata, Dr. Spooner writes as follows:—

“The principal work of the season has been limited to Site No. V (the south-west corner of the main terrace as a whole), and Site No. VI (the tract N. E. of the former and west of Site No. II where lies the mound corresponding to the so-called “S. E. Edifice” at Persepolis).

“At Site No. V last year I had found a short stretch of a massive wall which appeared to be part of the main rampart which I was endeavouring to prove as a boundary to the palace precincts as such. If such a boundary can be demonstrated conforming in essentials to the edge of the artificial platform at Persepolis, the probability that the Kumrahar site reflects the ancient Achaemenian seat will be immeasurably strengthened. Hence the importance of this work. The wall has now been cleared on both sides and has been found to be a true rampart, having originally supported rectangular turrets like those depicted in the most ancient Indian sculptures of palace walls. It has also been established that its course, so far as we can now see, follows prevailingly that of the corresponding edge in Persia, to this extent, that on the south of the terrace its main direction is toward the east, and that it proceeds in zigzags. But there is reason to believe that its outer face, and

indeed its inner face as well, has slipped down into the soft earth of the moat over considerable stretches, and this has made the task of following it very difficult. Toward the east the final zigzag which we have so far traced, turns again to the south, so as to pass just beyond the limits of the land acquired by Government. Here, of course, we could not pursue it further. Toward the west, after a zigzag to the north, it appears to have turned again west before entering on its main northerly course. Here, however, the masonry of the rampart has evidently been dug out at some later period, in the course of excavating what appears to be an ancient theatre or tank. Finding myself thus baffled in my attempt to follow the course of the rampart over any considerable distance by the ordinary methods of excavation, I had recourse to tracing the limits of the belt of blue clay which I had ascertained underlay the rampart, and which I judged to be consequent upon the decay of its original foundations. The work involves deep digging, and progress is necessarily slow; but so far as can be judged at present, this clue is likely to lead us to the wished for goal. We have traced this blue clay not only on the south, where we have found that it follows the windings of the wall, and leads us west under the tank or theatre aforementioned, but also for a short distance much farther to the north, where it skirts the western edge of the terrace south-west of the mound which corresponds in position to the palace of Darius. And we have determined its existence at one point in between. There is the hope, therefore, that ultimately we shall be able to trace the entire course of even the missing rampart by following this blue discolouration underneath, and from present appearances it seems likely that in the main its configuration will be found in such agreement with that of the terrace at Persepolis as to prove the connexion between the two sites. But certainty has not yet been attained.

"The so-called tank or theatre to which I have referred is itself a most interesting find. Why I am in doubt as to its nature is that its sides descend in tiers, like the seats in a theatre in classical lands. In the centre of each side, and thus running across these tiers, is a single flight of steps of bricks on edge, and one at least of these flights is blind. Otherwise it seems very much like a tank. The peasants of the neighbourhood, I find, used, even before my excavation at this spot, to call this particular tract Mauni Pokhar, although it has been dry for ages past. This suggests that in former times the people knew this spot to be a tank, and therefore the tank theory is more probable. But the main importance of this local name is that the word Mauni, which means 'a silent man', can be shown to be an ancient Hindu nickname for a Magian, the Magi having been dubbed "Silentiaries" in India from their rule of eating in silence. Thus a portion of the tract which my evidences have suggested was a copy of Persepolis, turns out to be denominated by the inhabitants themselves 'The Magian's Pool'.

"The site called No. VI, as I have stated, is the tract lying to the west of the building known as the S. E. Edifice at Persepolis. The palace of Xerxes occupies this position in the Persian complex, and since Site No. I was full of water, and Sites II and III were closed to exploration by the graveyards which they support, I determined to examine this region. The surface gave no indications of any buried remains here, and the spot was not one which an excavator would have

selected save in the exceptional conditions I have outlined. The hope, it will be seen, was a desperate one. However, I laid down certain parallel trenches on a diagonal, designed to cross the western wing of the anticipated palace, and very soon had the satisfaction of proving that, despite the perfect level of the modern surface, an extensive building had really occupied this site in ancient times. The walls first met were in striking agreement with the plan of Xerxes's palace, and it seemed almost certain that my assumption had been right. As the work developed, though, this similarity grew less and less, until it now seems probable that no connexion in design or otherwise exists between the two. The building has been found to trend to the east instead of to the west, as had been expected, and its nature is not ascertained. In some respects its ground plan looks like that of a monastery, in others it is less so. The total length of the main wall appears to be 192 feet, which is precisely double the length of the façade of the S. E. Edifice (96 feet) as restored by Fergusson, and there is nothing in the plan, as we now see it, to preclude the possibility that ultimately the building may prove to be a replica of this edifice with different orientation and increased size. I doubt, however, if such is the case. It appears more likely that in reality the brick walls which now meet the eye are not original, but were erected later over whatever structure the Mauryans built in this position. Underneath them lies a thick belt of blue clay, which does not appear to be connected with them, and I am inclined to think that this represents a different and an older building, constructed of wood, which has now apparently decayed *in toto*. Until its limits and configuration can be traced more in detail, no final judgment can be pronounced. I merely record here my impressions of the site at this particular stage of the work.

"In the Bulandi Bagh an attempt was made late in the season to clear out the southern end of the main trench which led north and south through the middle of the elevated tract which is the Bagh. I was desirous of examining its stratification in the light of knowledge acquired subsequently to the commencement of our work here three years ago. The results of this partial resumption of the excavation were most gratifying. My overseer, Mr. Ghose, first came upon clear traces of blue clay, and proceeded to follow it to the north. This finally led him to an extensive and most curious structure built of wood, which lies now, so far as we have uncovered it, as a slanting frame of mighty logs rising towards the east and there connecting with a horizontal floor of wood whose nature and construction are both obscure at present. It seems to be made of upright posts, but the matter is not settled yet. Whatever it may be, there can be no doubt of its immense antiquity (it goes down to a depth of 24 feet below the grass), and of the great desirability of examining it further. It is very full of promise. In its association, I may add, a good many coins were encountered, almost all of which are good specimens of the so-called Early Cast Coins.

"Thanks to the kind offices of the Honourable Mr. Justice Sharfuddin and to those also of Mr. Sayyed Nur-ul-Huda of Bankipore, the consent of the present owners of the property known as Kallu Khan's Bagh in the Saddar Gali, Patna, was obtained for me to examine the inner courtyard of their house, where according to the unpublished Report of Mr. P. C. Mukherji, a Mauryan column had been met

with years ago. This is the position in which Mr. Vincent Smith is inclined to locate the palace of Asoka, and I was desirous of testing the popular rumour of the place to ascertain whether the stone remains met with by the family while digging a well some twenty years ago were really of the Mauryan period. My Maulavi, Jamaluddin Muhammad, who was most helpful throughout the negotiations, was put in charge of the work. In all, five pits were sunk, one in the south-west angle of the courtyard itself, one in the S. W. angle of the surrounding verandah; one in the north-east corner of the courtyard; one in the verandah N. E. of this, and another in the verandah on the east side of the square. The actual column mentioned was not encountered in these operations, but abundant fragments of stone columns did come to light at varying depths, which leave no doubt whatever that popular rumour is correct, and that some important building of Mauryan times did indeed stand in this locality. The adequate examination of the tract is most desirable."

At Besnagar in Gwalior State Mr. Bhandarkar resumed his excavations of the Kham Baba site described in previous reports, his primary object being to trace out the extent of the early brick wall which had been exposed in the previous season and which was found to be of unique construction in that lime-mortar had been used as a cementing material. This wall ran from west to east and as the trench was broadened a second wall came to light of precisely the same kind running in the same direction and parallel to it. Both these walls were cleared simultaneously and were found to be 186' 6" long. At their eastern end they were connected by a cross wall nearly 10' long, while at the western ends they were joined by other walls set at right angles to them. Nearly 68 feet from the western end of the wall that had first been exposed were found two courses of stone forming apparently the bottom steps of a staircase which originally stood here. The purpose of these walls is not altogether clear, but Mr. Bhandarkar leans to the view that they are the remains of a *nahar* or canal of the third century B. C.; and this he thinks explains the fact that all the walls had a slight batter, as if intended to counteract the action of water.

Besnagar.

Besides the diggings round about Kham Baba, excavations were also started at another site in the heart of the ruins of old Vidisa. Here the most important discovery was that of three *Yajna-kundas* or sacrificial pits, standing nearly on the same level. From the finds made in association with them they appear to be of the pre-Gupta period. One is a square, the second an oblong, and the third a *Yoni kunda*. In between them the ground was covered with a brick pavement, only a few traces of which survive. Here and there, too, it was interspersed with brick drains at a slightly lower level, the latter being connected with the sacrificial pits and intended to carry off ceremonial washings. On the level of these *kundas*, again, and at a short distance to the east and the south were discovered the foundation and upper walls of two structures of what appear to have been spacious halls, one used most probably as an assembly, and the other as a dining hall.

The dimensions and the construction of the *kundas* leave little doubt in Mr. Bhandarkar's mind that they were used for a grand sacrifice, which may have lasted for a whole year or even longer, and he points out that such sacrifices were

attended by many Rishis and Brahmans well-versed in the scriptures, who during temporary lulls in the sacrificial activity entertained themselves with philosophical discussions and recitations of the Puranas. It was for these, he thinks, that the assembly and dining halls were required.

An interesting find made during the excavation of this site consisted of twenty-six pieces of clay, bearing impressions of seals, all of which were found in or near the halls alluded to. From their shape and the marks at the back, it is clear that, with one exception, they were all attached to letters and documents on small wooden boards. The majority contain the names of private individuals, but one bears the official designation : *hayahasty-adhikari*, i. e., an officer in charge of horses and elephants, and another bears the name of a ruler entitled *Maharaja Vishamitra-scamin*. The one seal which does not bear the marks of strings or wooden boards at its back, and which may be assumed, therefore, to pertain to the place where it was found, bears a legend in two lines which Mr. Bhandarkar reads as follows : (1) *Timitradatrisya(sa)ho(ta)-(2)p(o)ta-mamtra-sajana* (? i). The letters placed in circular brackets have not been properly impressed and have consequently been restored. "The meaning of the legend" says Mr. Bhandarkar "is not yet quite clear to me, but the words *hota*, *pota* and *mamtra*, which are technical to sacrificial literature, indicate that the seal is really connected with the *Yajnasala* ; and the import of the seal appears to be : Of Timitra, the donor, accompanied by the Hota, Pota, hymn-kinsmen, and..... Timitra appears to stand for the Greek name Demetrios, and it appears that this Greek was the *Yajamana* who instituted the sacrifice for which the *kundas* and the halls were constructed, supposing my reading of the seal inscription and its interpretation are correct."

Another indication of Greek influence is found in a mould of steatite stone for preparing medals, on one face of which is what looks like the obverse of an Indo-Bactrian drachma, exhibiting the bust of a king diademed and turned to the right. It is hanging from a bar, two strings from which are made to pass immediately behind the top of the bust. On the other face of the mould is the caduceus of Hermes also suspended from a bar. The workmanship of the mould and the carving of the bust and caduceus shows distinct Hellenistic influence. Another mould which was discovered on this site and which deserves to be mentioned has a fanciful figure consisting of two heads and one common animal body. One head is of a fabulous animal with horns and gaping jaws and the other of a bearded human being. On the reverse of this mould is engraved the legend *Huvilasya* (i. e., of Huvila) in characters resembling those on the seals.

Gwalior State.

In the course of the tours which Mr. M. B. Gardé made in the Gwalior State for the purpose, mainly, of cataloguing its antiquities, he was fortunate enough to discover several important monuments, and was able also to survey and to describe others of which very little had previously been known. These monuments comprise rock-cut images, temples, monasteries, mosques, tombs, caravansarais and sculptures, some of which are illustrated in Plates XIV-XVII. The first of these (Plate XIV a) is the Koshak Mahal at Fatehabad, two miles from Chanderi, an imposing edifice of four storeys measuring more than 115' along each of its sides and provided with four handsome entrances and a square court in the centre which was once

perhaps covered by a dome. The second (Plate XIV *b*) which is locally known as the Madrassah, is in reality a fifteenth-century tomb comprising a central-domed chamber and a verandah along each of its four sides with a small dome at each of the corners. On the succeeding plate (XV) is figured the richly carved gateway or *torana* of a temple of Kankali, locally known as Mohaj Mata, at Terahi, which, though somewhat top-heavy, is a fine example of this class of structure and exceptionally well preserved. The temple itself is of no great size, but is remarkable for the figure sculptures of a peculiarly gruesome aspect which adorn its exterior walls. Next to the *torana*, and on the same plate, is an illustration of the Mahadeva Temple at Kadwaha in the Isagarh District—the largest and most striking among a group of fifteen such edifices at that site. But more interesting still than these mediæval monuments are the finds that Mr. Garde made at Pawaya, a small village 20 miles north-east of Narwar, which stands on the site of the ancient city of Padmavati mentioned in the Vishnu Purana as a capital of the Nagas and described in some detail by the poet Bhavabhuti. The ruins of the old city cover an area of more than two square miles, which is seamed everywhere with brick walls and littered on the surface with broken brick and pottery. Here coins are found in abundance and Mr. Garde himself secured some thirty copper pieces, which proved to be issues of the Naga kings, Ganendra Deva, Skanda, Bhima, etc. Here, too, he found a variety of sculptures ranging in date from the first to the tenth century A. D. One of these, a most interesting image of the Yaksha Manibhadra dating from the beginning of the Christian era, is reproduced in Plate XVI *a* and *b*; and another—a monolithic palm-capital of about the same age—in Plate XVI *c*. The stylistic resemblance of the former to the figures in the round on the Sanchi gateways is very striking; while the latter finds a close parallel in the palm capitals at Besnagar. Lastly, on Plate XVII are figured two interesting examples of mediæval Hindu Monasteries. Such structures are exceedingly rare, and it is a matter for congratulation, therefore, that Mr. Garde has succeeded in discovering three more specimens, namely, one at Surwaya, another at Terahi and a third at Kadwaha. A fourth building of this type at Ranod was previously known, but was erroneously supposed by Sir A. Cunningham to be a palace. All these monasteries are of fairly large dimensions, that at Ranod having an external measurement of 132'4" × 106'5", while those at Kadwaha, Surwaya and Terahi are about two-thirds as large. All are two storeyed buildings in the Hindu style, massively constructed of large blocks of sandstone, chisel-dressed and laid without mortar. A noteworthy feature is the *chhajja* with its corrugated upper surface; and another noteworthy feature is the construction of the roofs which are composed of stone slabs laid at a slight incline in the manner shown in Plate XVII *b*. According to Kielhorn, Purandara, the founder of the Ranod monastery, lived in the second half of the 9th century A.D. and this would be an appropriate date for the building as determined by its architectural style. From an inscription, which is now in Gwalior, the Surwaya monastery appears to have been built some five generations later.

The principal excavations in the United Provinces were those carried out by Mr. Hargreaves at Sarnath. Around the courtyard of the main shrine search was made by him for further remains of the polished railing, portions of which had

Sarnath.

been recovered in 1906-7, but neither pillars nor crossbars were recovered, though spaces in the walls were found indicating where they formerly stood. An area 28 feet wide parallel to and to the north of the long pavement of the approach way was also cleared by Mr. Hargreaves to the level of the concrete pavement and revealed a collection of small stupas, ruined shrines, pedestals, inscriptions and images of the Gupta and mediæval periods. As the pavement was certainly built with reference to the Main Shrine and as the latter dates from the late mediæval epoch, it is obvious that the Gupta remains here do not occupy their original positions. To the south of the pavement a larger area was cleared and the digging carried to a greater depth, revealing small ruined stupas, bases of shrines, architectural fragments (Plate III) and a wealth of sculptures. "The most important of these", says Mr. Hargreaves, "were a number of large and excellently preserved Buddha images of the Gupta period. They were found not, as might have been expected, in the Gupta strata, but at a level two feet above that of the pavement and near its southern edge. Two were found lying side by side carefully laid on a bed of lime plaster, and although broken at the ankles, were rejoined without difficulty. One of these is inscribed and dated 154 G. E., in the reign of Kumargupta. Three others, similarly placed, were found at the same level a little to the west of the former. Of these two are inscribed and dated in 157 G. E., in the reign of Buddhagupta. These three inscribed images appear to be the gift of one Abhayamitra. Whether these images had been so placed to hide them from possible enemies or deposited in stupas which have now entirely disappeared it is impossible to state.

"That all ancient statues were not so treated in the mediæval period is plain from the portion of the inscribed pedestal mentioned above. Numerous mediæval statues (Plate VII *a, b, d*) and terracotta sealings, some of a type not previously recovered on this site, were also found in this area but all on or above the level of the pavement.

"In the western area the special object of excavation was to ascertain whether at the level of the base of the Asoka pillar any contemporary remains still existed. The structural remains disclosed were few, but they seem to indicate the former existence of a succession of monasteries in this area. After the removal of the existing remains of the late mediæval period an earlier mediæval stratum yielding terracottas and sculptured fragments was disclosed. Below this, again, a small collection of Kushana coins was recovered and, still deeper, the first fragmentary walling, seemingly of the 1st century A. D. Level with the base of this wall were remains of an earlier period, apparently Mauryan. Over these Mauryan remains was a filling of débris one and a half feet thick, an almost solid mass of stone fragments of the Mauryan and Sunga periods. Some of the monuments of which this débris had once formed part must have been wilfully destroyed, though a number of railing fragments had suffered from the effects of fire. Fragmentary as are these sculptured remains they are, nevertheless, of the greatest interest and value, comprising human and animal figures (Plate XVIII) and fragments of a large wheel such as might have crowned a column, as well as copings, capitals, railings and inscribed pillars."

The human and semi-human heads (Plate XVIII *a, b, c, h, and i*) afford especially valuable material for the study of early Indian sculpture; for on the one hand they exhibit, like the capital of the Asoka pillars at Sarnath and at Sanchi, an immense superiority over the approximately contemporary statues from Parkham and Patna; on the other, they give us in the mural crown, the bay wreath and other features another clear — nay, indisputable — indication of the Perso-Hellenistic influence to which this superiority was due.

Of exploration in the Madras Presidency and Burma there is not much to chronicle. The only excavation carried out by Mr. Longhurst in the former circle was among a group of prehistoric tombs at Gajjalakonda in the Kurnool District. In outward appearance these graves resemble ordinary cairns or stone circles. On digging into the cairn, however, for a depth of about two feet, there come to view the great slabs of stone forming the roof of the tomb chamber (Plate XIX). "The tomb," says Mr. Longhurst, "consists of a rectangular chamber walled and flagged with massive slabs of stone let into the ground in an upright position. Each is provided with a small entrance passage facing the south. Both the tomb chamber and the passage in front are filled to the brim with earth and stones. On removing this, one finds at the bottom of the tomb the remains of the dead in the form of small fragments of bone mixed with earth and placed in an earthenware sarcophagus or else deposited in a shallow coffin made of cut slabs of stone imbedded in the floor of the tomb. Domestic vessels, food and water-pots were placed alongside of the dead but I found no remains of metal implements or beads, although many of the slabs showed signs of having been cut and dressed with metal tools. The sarcophagi were raised from the floor of the tomb on ring-stands and pots. When these ring-stands were absent, the sarcophagi were provided with small legs on the underside, but in such cases the sarcophagi and pottery vessels were placed in a pit in the ground and not in a cell-tomb". A detailed description of the opening of these interesting tombs, accompanied by representative photographs and drawings has appeared in Part II of the Report of the Southern Circle for 1914-15.

Madras and
Burma.

In Burma, the principal discoveries were made by M. Duroiselle at the Shwegugyi and Ajapala pagodas in the Pegu district. Here he unearthed over 160 terracotta plaques adorned with reliefs, illustrating the temptation of the Buddha by Mara's daughters. A singular trait of these reliefs, a specimen of which is reproduced in Plate XX *a*, is that they represent the daughters as having appeared to the Buddha in a succession of forms from young virgins to middle aged and married women, in order apparently to exercise every kind of female blandishment upon him. This is made clear by the titles in the Talaing language upon many of them, which designate some of the figures as "young maidens", others as "women without children", others as "mothers of one child"; others as "mothers of two children" and so on. The stone relief of the Buddha with an attendant Bodhisattva at each side, which is figured in Plate XX *b*, comes from Twante in Lower Burma where it was unearthed by the Abbott of the Sudaungpyi Monastery. The three succeeding figures (*c, d, and e*) are from the Kyauktaga Grant in the Pegu District and belong to the 13th century or later. The last of the three (*e*) is of specially

fine workmanship. According to Mr. Taw Sein Ko, it represents the Buddha in the guise of a Chakravartin, and the spiral crown in the form of a stupa is thought by him to denote Cambodian influence. The last three illustrations on the same plate are specimens of some terracotta tablets with inscriptions in the Devanagari character, which were found at Pagan. They date from the 11th century A. D., and closely resemble many votive tablets found at Bodh Gaya and other places in Northern India. In one of them (figure *g*) are depicted the eight principal scenes in the life of the Buddha, much as they are depicted in the earlier stone reliefs at Sarnath.

Museums and
minor antiqui-
ties.

My report on the working of the Indian Museum, Calcutta, was submitted, as usual, to the Trustees and is reprinted at the end of this report as Appendix E. Arrangements have now been made for the exhibition of the antiquities in this museum on more approved and up-to-date lines both by the provision of many new show-cases, and by the appointment of Mr. Percy Brown, Superintendent of the Arts Section, to direct the exhibition work in the archaeological section. At Bombay, the building of the Prince of Wales' Museum has now been completed, but for the duration of the war it is being used as a hospital. Mr. K. N. Dikshit, a government archaeological scholar, was appointed Assistant Curator of this museum in October 1914, and since then has been touring through the Bombay Presidency collecting antiquities for it. In the Peshawar Museum Pandit V. Natesa Aiyar has made good headway with the arrangement and cataloguing of the large number of Gandhara sculptures recovered from the excavations at Sahr-i-bahlol and Takht-i-Bahi, which had been lying in the museum godowns, and also with the preparation of a catalogue raisonné of the books in the museum library. In the Lucknow Museum, the antiquities discovered at Kasia have been duly arranged and labelled and are now open to the public; and similar arrangements are being made for the exhibition of the antiquities recovered from the excavations at Saheth Maheth. The Mughal coins in this museum have been arranged by Mr. J. C. Brown and the Gupta coins by the Curator, Pandit Hirananda Sastri. The publication of the catalogue of the antiquities in the Lucknow museum, which had been compiled by Dr. Vogel, had to be postponed this year, as owing to the European war the manuscripts could not be sent to the author for revision.

Fresh acquisitions.

Among a large variety of objects acquired for the archaeological museums in India the greater part consisted of sculptures and coins, many of which were received as presents from Local Governments, Native States or private individuals. Of the new accessions the following are especially noteworthy:— At the Indian Museum, a representative series of prehistoric antiquities from the Tinnevely District, Madras; at the Lucknow Museum several Brahmanical images and inscriptions of Govinda Chandra and Isvara Varman; at the Central Museum, Lahore, eight gold ornaments found in the Hissar District; and several figures of Buddha in gilt, brass or marble; at the Mathura Museum Brahmanic and Buddhist sculptures, some with inscriptions dating from the Kushan to the mediæval period, a brass image of Surya and a seated figure of Vishnu of the Kushan period; at the Taj Museum, a firman of Shah Alam, II; and at the Delhi Museum, a firman of Muhammad Shah, an old railing post and an inscribed stone discovered locally. At the Mysore

Government Museum the additions included a brass cannon, old Carnatic guns, and an inlaid Carnatic sword; while those at Ajmer, Bombay, Madras and Rajkot consisted mainly of inscriptions belonging to the kings of the Rajput, the Kadamba and the Ganga dynasties, respectively.

Of the treasure trove finds made during the year under review the majority consisted, as usual, of coins. The largest number of these came from the Bombay Presidency but no information is at present to hand regarding them. Of the ten finds of treasure trove reported in the Eastern Circle, none yielded coins of sufficient value to be acquired by Government. In Burma silver coins to the number of 183 were found in two lots in the Prome District all of which bear the *Linga* symbol and belong to the type illustrated on Pl. XLVII of the *Archæological Annual* for 1910-11. Besides these, two square gold coins, one with the legend "*Manipure-svara*" and the other "*Jaiari*" in Nagari characters were found in the relic chamber of the Datpaungzedi pagoda at Sagaing and are deposited along with the other relics in the Pagoda.

Treasure Trove.

Of the finds other than coins the following are noteworthy, though nothing is yet known of the date or artistic merit of the articles included in items 1, 2, 3 and 6.

(1) A silver locket with chains found in the village of Dhoralia in the Bakarganj District and acquired for the Dacca Museum.

(2) Gold ornaments found in Taloda in West Khandesh District.

(3) Twenty-one silver ornaments from Bombay, consisting of 6 talismans, 2 tassels, 8 earrings, 2 coin-pendants, 1 armlet and 2 pieces of an armplate.

(4) Two silver and bronze images of Buddha, a pair of spectacles and an inscribed silver scroll from the site of a pagoda at Kathé. The Burmese inscription on the scroll records the visit in June 1785 of *So Thugyi*, officer-in-charge of the ruby mines, with his two wives, and mentions that this official had hereditary rights to his appointment at the mines.

(5) Four images of the Buddha made of an alloy of bronze and silver from the Kyauktaga Grant in the Pegu District *cf.* p. 23 *ante* and Plate XX *c, d* and *e*.

(6) Some images of Brahmanic gods and goddesses from the Tanjore and Trichinopoly Districts.

In the report of the *Archæological Superintendent*, Frontier Circle, attention is drawn to the fact that no report of treasure trove has been made to him during the last five years, though a hoard of 1,100 coins which ought to have come within the operations of the *Treasure Trove Act*, was put up for sale by private parties and purchased by him for the Peshawar Museum.

Of the *Epigraphical* work accomplished during the year under review Rao Sahib H. Krishna Sastri, officiating Government Epigraphist, furnishes the following account:

Epigraphy.

"Parts I and II of volume XII of the *Epigraphia Indica* have been issued by Dr. Konow. Part III, which was ordered for issue has been unavoidably delayed owing to certain facsimile plates despatched by Messrs. W. Griggs and Sons, London, not having reached the Calcutta Press. The published parts include the valuable Planetary Tables computed by Professor Hermann Jacobi of Bonn. These

tables, as the author tells us in his prefatory remarks, serve to calculate the position of planets for any date between A. D. 300 and 2000, in order to verify the constellation of the planets, or a horoscope, given in any inscription or any other document. A contribution of much interest is the paper of Professor Padmanatha Vidyavinoda on the Nidhanpur plates of Bhaskaravarman, king of Kamarupa (Assam) and a contemporary of Harshavardhana of Thanesar. The plates contain the most ancient record that has hitherto been discovered in the province of Assam and are also by far the most important documents of all that relate to the ancient history of the great kingdom of Kamarupa or Pragjyotisha. The information supplied by the plates is supplemented by the two historical works: Bana's *Harshacharita* and the *Si-yu-ki* of Hsien Tsang. The latter visited the capital of Bhaskaravarman in A. D. 643. The author has discussed with great ability in this paper the questions: how and when Karnasuvarna came under the sway of Bhaskaravarman, and whether or not Sylhet-Srihatta formed part of the kingdom of Kamarupa. The two copper plate records from the Ganjam District edited by Prof. Hultzsch are also of great value for the history of the Andhras. The Magadha family, to which Saktivarman of the Ragolu plates belonged, and the matronymic Vasishthiputra which he bore, deserve to be specially noted. The Ladnu inscription of Sadharana, dated in Vikrama-Samvat 1373 (A. D. 1317) and published by Pandit Ramakarna, gives a list of ten Muhammadan emperors of Delhi from Shahab-ud-din Ghorî to Ala-ud-din Khaljî; but this list differs a great deal from that given in the Persian chronicle *Tawarikh-i-Firishta*. In the Batihagarh stone inscription of the time of Nasir-ud-din Mahmud of the slave dynasty (A. D. 1246-1266), we find a mention made of the Kharpara armies. The author of the article, Rai Bahadur Hiralal, identifies the Kharparas with the Kharparikas mentioned in Samudragupta's pillar inscription of Allahabad. The Vadner plates of the Kalachchuri (Kalachuri) king Buddhara, dated in the year 360 of the Kalachuri era, contain the earliest known grant of that king. Other papers of interest are: the Chatsu inscription of Baladitya by D. R. Bhandarkar; the Spurious Islampur plates of the Ganga king Vijayaditya by Professor K. R. Pathak and the Editor; the Nammuru grant of Ammaraja II by Professor E. Hultzsch and the Belava copper plate of Bhojavarmadeva by Radha-govinda Basak.

"Of the work done in the several Circles and Museums, the epigraphical discoveries reported by the Superintendent of the Hindu and Buddhist Monuments, Northern Circle, which number 73,¹ are particularly interesting. These include quite a large number of epigraphs recovered at Sarnath and range in date from the Mauryan period to mediæval times. The most important, however, from the historical point of view, are the inscriptions discovered on the pedestals of three large and beautiful images of Buddha. One of them bears the name Kumaragupta and is dated G. E. 154 (c. A. D. 474); while the other two which are dated G. E. 157 (c. A. D. 477) bear the name Buddhagupta. It is not known if these are to be recognised as kings in the direct line of the Imperial Gupta family. A full discussion, however, of their proper place in the Gupta chronology will appear in a future report. The gift

¹ A synoptic list of these is given in the *Annual Progress Report of the Superintendent, Hindu and Buddhist Monuments, Northern Circle, 1914-15*.

recorded in the three epigraphs was made by one and the same donor—the *bhikshu* Abhayamitra, and the conclusion is, therefore, apparent that Buddhagupta must, at any rate, have succeeded to the throne immediately after Kumaragupta. Several other epigraphs were also collected from the Jhansi district. An inscription in later Gupta characters on an octagonal pillar in the great Jaina temple at Deogarh is seemingly continued on all sides from top to bottom, and promises to be a most valuable record. Two other records of a similar type discovered in the same place, will soon be published by the Assistant Surveyor, Mr. Y. R. Gupte, in the pages of the *Epigraphia Indica*. It is hoped that the interesting octagonal pillar inscription will also be copied and published. From the well-known temple of Sitaramji at Soron, the find is reported of an inscription of the reign of Madanapala, dated on the 12th day of the bright fortnight of Vaisakha, in Samvat 1245 (A. D. 1187-88). This also is to be edited by the Assistant Surveyor. An article on two copper plate grants from Talesvar, which have been pronounced to be ancient forgeries, has already been drawn up by Mr. Y. R. Gupte for the *Epigraphia Indica*.

“Three copper plate records were added to the collection of the Provincial Museum, Lucknow. One of these, which is not yet published, is the property of the Raja of Itaunja. It is dated in the reign of the Gahadawala king, Govindachandra of Kanauj, in the Vikrama year 1186 (A. D. 1129-30). The two others are the Talesvar plates, which, as already remarked, are shortly to appear in the *Epigraphia Indica*. An estampage of an unpublished stone inscription of a hitherto unknown Maukharī prince, Suryavarman son of Isanavarman, has also been secured by the Museum. It is dated in 611 without specification of any era. Mr. Hirananda Sastri thinks that the era intended may have been Vikrama. The date, together with the mention of Andhras and other people whom Isanavarman conquered, makes the record very interesting.

“Mr. R. D. Banerji of the Indian Museum, Calcutta, reports the find of a valuable copper-plate which brings to light a new dynasty of Buddhist kings in North Tosali. Mr. Banerji is of opinion that king Santikaradeva known from two cave inscriptions in Orissa, belongs most probably also to the same dynasty.

“The only document of interest discovered in the Western Circle, are the Sangoli plates of the early Kadamba king Harivarman. From the valuable note supplied by Mr. D. R. Bhandarkar on these plates it is gathered that the grant recorded on them is wholly Brahmanical in its character, whereas all the other early Kadamba grants, hitherto known, of Kakutsthavarman and his descendants Mrigesavarman and Ravivarman testify amply to the leaning of the royal family towards Jainism. The king professes to have been keenly bent on serving the twice-born (*i. e.* Brahman) classes and to be a great devotee of Siva. Published records of king Harivarman, issued in the fourth and the fifth years of his reign, are of a Jaina nature and Mr. Bhandarkar infers from this that Harivarman must have changed his faith sometime between the fifth and the eighth years of his reign. It may, however, be noted that the Talgund inscription of Kakutsthavarman (*Ep. Ind.*, vol. VIII, pp. 24ff), which is much older than most of the published Kadamba plates, is purely Saiva; and the Nilambur plates of Ravivarman (*ibid.* pp. 146ff), who was

possibly the father of Harivarman of the Sangoli plates, record a grant made to a Brahman.

"The Rajputana Museum, Ajmere, sends also, for the first time, a report on its epigraphical collection, which includes in all fourteen inscriptions. They are of great importance for the history of Rajputana and furnish us dates of the early rulers of Udaypur, Dungarpur, and Banswara States, whose correct dates were not known before. Three of them belong to the Parmara chief Chamundaraja of Malva. Two inscriptions of the Chaulukya kings Siddharaja-Jayasimha and Bhimadeva II of Gujarat found at Talwara (in the Banswara State) and at Bara Dinea (in the Dungarpur State) go to prove that the country known as Vagad, which includes the two above-named States, was under the rule of the Chaulukyan kings of Gujarat, in the 12th century A. D.

"In the Gwalior State forty-four inscriptions were copied by Mr. Garde, the newly appointed Inspector of Archaeology for that State. Of these one is in Brahmi, 29 in Nagari and 14 in Arabic or Persian characters. The earliest of these, found at Pawaya, is a record of Sivanandi. Its object is to record the installation of an image of (the Yaksha) Manibhadra. Sivanandi, the king, in whose regnal year the inscription is dated, is not known from any other sources. Another inscription, undated, but which may, on palæographical grounds, be assigned to the 7th century A. D., records the construction of a temple of Siva, by a king named Srivatsaraja. Some of the ancestors of this king bear names ending in *vardhana*; and Mr. Garde surmises—perhaps rightly—that they belonged to the royal family of Harshavardhana of Kanauj. A new branch of the Pratiharas, not included in Professor Kielhorn's List of Northern Inscriptions, is revealed by a mutilated record of about the 13th century A. D. discovered near Chanderi. The mention of a fortress called Kirtidurga built on a high mountain by king Kirtipala of this dynasty enables Mr. Garde to identify Chandrapur the capital of these kings with the more modern Chanderi, although Cunningham thought that the fort on the hill here was constructed as late as the 15th century.

"A noteworthy point with regard to the progress of epigraphical work in the Burma Circle, is the great interest evinced by the Government of Burma in the publication of inscriptions and the sanction that has recently been accorded by them to the issue of Mr. Blagden's translation of Talaing inscriptions. The translations will be published in the *Epigraphia Indica*. Four inscriptions in the now extinct Pyu language have already been edited by Mr. Blagden in the *Epigraphia Indica*. Although for many reasons he is inclined to place them in the 7th or 8th century A.D., the suggestion has been made that they may belong to the 4th century. The probable correctness of this view is enhanced by the discovery of two lines of writing in the Brahmi script on one of the Pyu records discovered at Halingyi. This is the first time in Burma that an inscription in Brahmi characters has been found. It has to be remarked that in dealing with the Pyu inscriptions, one great difficulty which has not yet been satisfactorily overcome, is the absence of a reliable vocabulary; and the problem for solution is to find its living representatives. With this end in view, a collection is being made of words in the modern spoken dialects of Kadu, Lahu, Yawyin, Lo-lo and Li-so. In this way it is hoped that it may be

possible to throw some light on the contents of these mysterious Pyu records which deal with the prehistoric period of Burmese history. Of the 23 other new inscriptions collected in the circle 20 are in Burmese and 3 in Talaing. A record discovered at Pakokku places the Chinese expedition to Myinzain (Upper Burma), not in A. D. 1300 as the chronicles mention, but in A. D. 1302. The translation and annotation of the volume of inscriptions hitherto found in Burma, has been begun. Many of these documents are sure to yield valuable information on the civil and religious history of Burma.

"In the Southern Circle the returns for the year show an increase of 182 inscriptions, copied and examined, over those of the previous year. Eleven copper-plates were examined, and as many as 105 photos and 104 sketches prepared. An epigraphical discovery of more than usual interest and importance is that of an Asoka Rock Edict on the Maski Hill in the Nizam's Dominions, brought to light by Messrs. Bradon and Bishop. A fact which invests this record with special importance is the mention of Asoka both by his title Devanampiya and his proper name Asoka. It has already been published with text and translation under the auspices of His Highness the Nizam's Government.

"Another record in the Brahmi script which, like others noted in some previous Reports on Epigraphy, defies decipherment, was copied from a cavern at Sittannavasal in the Pudukkottai State. The limit of the Pallava dominion is proved to have extended farther south, by the discovery of an inscription of Nandipotavarman and one of Dantippottaraiyar in the rock-cut cavern at Kunnandar-koyil in the Pudukkottai State. The epigraphical survey of the Hadagalli taluk (Bellary district), brought to light inscriptions of the Western Chalukya kings Jayasimha II, Somesvara I and II, Vikramaditya VI, Jagadekamalla II and Somesvara IV, which supply a regular list of the Nolamba Pallava subordinates of these kings, the extent of territory ruled over by them, etc. From one of these records we learn also the names of some of the successive teachers of the Lakulisa-Pasupata sect. A very interesting piece of information supplied by a Western Chalukya inscription, is the reference to the architect Bammoja who, as the inscription states 'was a clever architect of the Kali-age; the master of the 64 arts and sciences; clever builder of the sixty-four varieties of mansions and the inventor(?) of the four types of buildings called Nagara, Kalinga, Dravida and Vesara.'

"As usual the bulk of the collection belongs to the Cholas. Among these are six records of an early Chola king named only by his title Rajakesarivarman. On palaeographical evidence they may be roughly assigned to a period earlier than that of Parantaka I (*i. e.* prior to 907 A. D.). By calculation of the astronomical details contained in these records, Dewan Bahadur L. D. Swamikannu Pillai has been able to support this palaeographical inference and is inclined to attribute them to Aditya I., for whom no dated records were hitherto available. Tours of inspection by kings and auditing of temple-accounts by appointed officers are some of the other items of general interest supplied by a study of the Chola inscriptions.

"Among the Pandya inscriptions in this year's collection, there are some of Vira-Pandya, 'who took the head of the Chola', of Maravarman Sundara-Pandya I

(dated A. D. 1239); and Jatavarman Vira-Pandya, the conqueror of Kongu and Ilam (Ceylon).

"Coming to later times it may be noted that one of the numerous inscriptions of the Vijayanagara kings secured this year, comes from Srisailam in the Kurnool district and belongs to the reign of Harihara (I). Here the king receives the attributes Rajavesyabhujanga and Rajavalmika, the latter, evidently in consideration of his high intellectual attainments, or of the patronage which he freely offered to men of learning and literature. A very interesting record of the time of Devaraya II has preserved for us the rates of assessment on several classes of land, professions and industries in the 15th century A. D. A Vijayanagara inscription of the same century mentions the village Idavai and its surname Pandiyanai-ven-kanda-Sola-Chaturvedimangalam *i. e.* 'the Brahman village of the Chola king who saw the back of (*i. e.* defeated) the Pandya.' This is unimpeachable evidence of the victory scored by a Chola king over a Pandya. The reference may possibly be to the expedition of Maranjadaiyan in the 9th century A. D. against Idavai in the Chola country.

"An interesting record from Ratnagiri in the Trichinopoly district furnishes a genealogical account of the Karnata chiefs of the Araviti family, and confirms the victorious campaign of Vitthala already known to us, as stated at page 195f of the *Archæological Survey Report* for 1908-9. It mentions that under orders from Sadasiva and his minister Ramaraja, the two cousins of the latter, *viz.*, Vitthala and Chinna-Timma, started on a *vijaya-yatra*, carried their victorious arms up to the very shore of the Southern Ocean and in Saka 1467 (A. D. 1545-46) set up pillars of victory at Ramasetu (*i. e.* Ramesvaram) and Kanyakumari (Cape Comorin).

"Among the miscellaneous records examined during the year, one belonging to the Hoysala king Vira-Ballala II, states that his queen Padmalamahadevi was governing Posa-Padangile (Hira-Hadagalli). A record from Srisailam furnishes the genealogy of the Reddis of Kondavidu and mentions the building of a pavilion by Annavema-Reddi in or about A. D. 1377-78, in which the heroic votaries of Siva (?) from the Konga country used to cut off their heads or tongues as votive offerings to the god. This affords a clear proof of the existence of human sacrifice in the 14th century A. D.

"The Golconda ministers Akkanna and Madanna, who were the contemporaries of the Dutch journalist Havart, and the powerful officers of Tanisha (Abul Hassan) in the 17th century A. D., are stated in a copper-plate inscription, to have made a grant of land to the Sankaracharya-Matha at Kumbakonam, which, under the name Sarada-Matha, was originally located at Kanchi (Conjeeveram). Figures of Akkanna and Madanna drawn from life are given in the Dutch journal and are reproduced in the Report of the Southern Circle."

Tours.

The tours of the Provincial Superintendents are chronicled in their respective annual reports, and need not be detailed again. My own tours embraced visits to Delhi, Bombay, Calcutta, Sarnath, Ajanta, Gwalior, Muttra, and Taxila. At Sanchi I was encamped for six weeks, and at Taxila for nine weeks, in order to conduct the extensive works of exploration and conservation which were in progress at both those places.

Publications.

The following publications were issued during the year :—

(1) Annual Reports of the Southern, Western, Eastern, Northern, Frontier, and Burma Circles as well as the Epigraphical Report of the Assistant Archaeological Superintendent, Southern Circle, for the year 1914-15; (2) Annual reports of the Director General of Archaeology, Part II, for the year 1909-10 and 1910-11; (3) Annual Report of the Archaeological Section of the Indian Museum, Calcutta, for the year 1913-14; (4) *Epigraphia Indica*, Vol. XI, parts 7 and 8, and Vol. XII, parts 1 and 2; (5) *Antiquities of Indian Tibet* by Dr. A. H. Francke, Part I; (6) *The Buddha Story in Stone* by Mr. H. Hargreaves; (7) *The Ancient Geography of Gandhara*, translated by Mr. H. Hargreaves from the *Notes sur la Géographie ancienne du Gandhara* by M. A. Foucher; (8) A Catalogue of the Sarnath Museum by Pandit Daya Ram Sahni; (9) A Catalogue of the Indo-Greek and Mughal Coins of the Lahore Museum by Mr. R. B. Whitehead in 2 volumes; (10) List of Survey drawings in the Southern Circle.

The following publications are in hand and are in more or less advanced stages of completion. (1) List of ancient monuments in the Southern Circle; (2) Illustrated monograph on the ruins of Vijayanagar; (3) South Indian Inscriptions, Vol. II, part 5, and Vol. III, part 3; (4) Several monographs and guide-books in the Burma Circle.

Six hundred and eighty new volumes including periodicals were added to the library of which 175 were obtained in exchange for our own publications, 119 were received as presents, and 386 purchased. Among the new accessions the following may be mentioned:—*Shahnamah of Firdausi* by A. G. Warner (Vols. 1, 2, 3, 4 and 5); *The Press and Poetry of modern Persia* by E. E. Brown; *Zeus* by E. B. Cook, Vol. I; *Problems of the Far East* by the Hon'ble George N. Curzon, M. P.; *Panini: his place in Sanskrit Literature* by Theodor Goldstücker; *Encyclopædia of Religion and Ethics*, Vol. 6; *Encyclopædia of Islam*, Nos. 18, 19 and 20; *Publications of the Babylonian Section of the University of Pennsylvania* (42 vols.); *Zenith of Indian Art* by E. B. Havell; *Hymns to the goddess* translated from the Sanskrit by Arthur and Ellen Avalon; *Personal religion in Egypt before Christianity* by W. M. Flinders Petrie.

A list of the photographic negatives prepared during the year is published in Appendix D. of this report. Besides the sets of prints prepared for record in my office and for the India Office and the Indian Museum, 33 prints were sold to the public. 1,217 photographs were purchased for the Department.

The post of the Government Epigraphist for India remained vacant, Mr. H. Krishna Sastri holding charge of the current duties of the office and Prof. Sten Konow, Ph.D., remaining as editor of the *Epigraphia Indica*. Owing to the war Dr. J. Horovitz, Epigraphist for Moslem Inscriptions, who was of German nationality, was interned at Ahmednagar in August 1914, and his office thereafter remained vacant. Mr. Longhurst, the Superintendent of the Southern Circle, was absent on military duty for a month. Dr. Spooner was on combined leave from 26th June to 12th December, 1914, and during his absence the Assistant Superintendent, Mr. J. F. Blakiston, held charge of the Superintendent's duties in addition to his own. Mr. Gordon Sanderson, the Superintendent in charge of the Muhammadan and British Monuments in the Northern Circle, was permitted to join the

Library.

Photographs.

Personnel.

Reserve of Officers in the Indian Army on the 16th July, 1914, and during his absence the Assistant Superintendent, Maulvi Zafar Hasan, temporarily held charge of his office, M. Chas. Duroiselle officiated as Superintendent in the Burma Circle until 1st August, 1914, when Mr. Taw Sein Ko returned from leave and resumed charge; M. Duroiselle was, however, appointed to the newly created post of Assistant Superintendent for Epigraphy with effect from the same date. Sir Aurel Stein continued to be on special duty out of India, and my Excavation Assistant, Pandit V. Natesa Aiyar, B.A., was appointed officiating Superintendent in the Frontier Circle on the 8th March, 1915.

Scholarships.

Archæological scholarships were held by Messrs. H. Panday, K. N. Dikshit, Muhammad Hamid and Banarsi Das. Mr. H. Panday was appointed my Excavation Assistant on 9th March, 1915, and Mr. Dikshit, Curator of the Prince of Wales Museum, Bombay, on 1st November, 1914. Dr. V. S. Sukthankar, M.A., Ph. D., was selected on 1st March, 1915, in place of Mr. Dikshit and Mr. M. Ghose, M.A., was selected in place of Mr. Banarsi Das, who resigned his scholarship on 15th October, 1914. In Burma, one of the scholarships was awarded to Mr. E. Pritchard, B.A., who joined the Superintendent's office on the 12th August, 1914. The other Burmese scholarship remained vacant. Mr. M. Sana Ullah was awarded a scholarship for his training as archæological chemist and went to England on the 20th February, 1915. Three architectural scholarships instituted by the Government of India in May, 1914, were awarded to Messrs. G. C. Chandra, B. L. Dhama and S. M. Subrahmanyam for purposes of training. The scholars were attached to the Office of the Consulting Architect to the Government of Bombay.

JOHN MARSHALL,

Director General of Archæology.

APPENDIX A.

Special grants-in-aid.—The following grants-in-aid were made by the Government of India from the lakh of rupees set apart for archaeological purposes.

	Rs.
Punjab	16,000
United Provinces of Agra and Oudh	5,000
Burma	5,000
Dhar State	4,000
Cataloguing and labelling ancient manuscripts from Benares	1,210
Publication of Bakhsali Inscriptions	4,000
Publication of Dr. Francke's report on Indian Tibet, Vols. II and III	7,500
Exploration and Conservation at Sanchi	10,000
Excavation and Conservation at Taxila	20,000
Excavation and Conservation at Sarnath and Muttra	5,500
Purchase of antiquities	3,000
Library	5,000
Sanchi Monograph	11,400
Balance	2,390
TOTAL	1,00,000

APPENDIX B.

Expenditure on the Archaeological Department for the year 1914-15.

	Rs.
Southern Circle { Archaeology	17,685
{ Epigraphy	20,456
Western Circle	19,813
Eastern Circle	40,457
Northern Circle { Superintendent, Hindu and Buddhist Monuments	16,461
{ Superintendent, Muhammadan and British Monuments	23,532
Frontier Circle	14,658
Burma Circle	32,285
Director General of Archaeology and Government Epigraphist for India	84,210
Sir Aurel Stein's deputation to Central Asia	15,940
TOTAL	2,85,497

Expenditure on conservation, excavation, etc., including grants-in-aid from Imperial Revenues.

	Rs.
Madras	32,997
Delhi	85,019
Punjab	59,018
United Provinces	65,662
Bombay	23,272
Burma	31,569
Bengal	19,999
Bihar and Orissa	41,880
Central Provinces	13,461

APPENDIX B—*contd.*

	Rs.
North-West Frontier Province	1,850
Assam	3,632
Ajmer	1,585
Dhar State	4,000
Cataloguing ancient manuscripts from Benares	1,210
Publication of the Bakhsali Inscriptions	900
Sanchi excavations	10,000
Taxila „	20,000
Antiquities	3,000
Library	3,987
Excavations at Sarnath and Muttra	5,500
TOTAL	4,28,541

APPENDIX C.

Drawings and photographs prepared by the Department.

DRAWINGS.

Southern Circle	{ Archaeology	10
	{ Epigraphy	104
Western Circle		6
Eastern Circle		5
Northern Circle	{ Superintendent, Hindu and Buddhist Monuments	13
	{ Superintendent, Muhammadan and British Monuments	17
Burma Circle		12
Frontier Circle		2
Director General of Archaeology		11
TOTAL		180

PHOTOGRAPHS.

Southern Circle	{ Archaeology	102
	{ Epigraphy	94
Western Circle		208
Eastern Circle		153
Northern Circle	{ Superintendent, Hindu and Buddhist Monuments	195
	{ Superintendent, Muhammadan and British Monuments	460
Burma Circle		173
Frontier Circle		52
Director General of Archaeology		302
TOTAL		1,739

APPENDIX D.

List of negatives prepared by the Office of the Director General of Archaeology in India during the year 1914-15.

No.	Name of place.	Description.	Size.
1 and 2	Sanchi.	General view of hill from N.-W., after the completion of Stupa III.	$8\frac{1}{2} \times 6\frac{1}{2}$
3	"	Corner pillar of berm rail, front view	"
4	"	Ditto ditto side view	"
5	"	Portion of pillar and capital near Stupa II.	"
6	"	Stupa III, detailed view of same	12×10
7	"	Ditto showing two ground pillars <i>in situ</i>	$8\frac{1}{2} \times 6\frac{1}{2}$
8	"	Ditto detail of two ground rails	"
9	"	Ditto corner pillar of stairway rail, front view	"
10	"	Stupa IV, broken stone umbrella	12×10
11	"	Temple 21, general view from W.	"
12	"	Ditto detail of plinth from N.-W.	"
13	"	Ditto seated Buddha inside the Temple	$8\frac{1}{2} \times 6\frac{1}{2}$
14	"	Ditto showing plinth from S.-W., and a small shrine excavated this year.	"
15	"	Inscribed Gupta pillar.	"
16	"	Temple 18, general view from N.-W.	12×10
17	"	Ditto ditto from E.	"
18	"	Another view of same	"
19	"	Ditto outer wall from S.-W.	"
20	"	Ditto from S.-E.	"
21	"	Ditto from S.-E.	$8\frac{1}{2} \times 6\frac{1}{2}$
22 and 22a	"	General view of Stupa I, including outer wall of Temple 18.	"
23	"	General view of Stupa I, showing detail of terrace wall on S.	"
24	"	Stupa II, railing pillar No. 41, West face	"
25	"	Ditto general view from E. (Copied from Mr. Cousens' negative No. 1840).	12×10
26	Chir Tope. (Taxila).	Silver record original.	$8\frac{1}{2} \times 6\frac{1}{2}$

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
27	Chir Tope. (Taxila).	Kharoshthi inscription on stone	$8\frac{1}{2} \times 6\frac{1}{2}$
28	"	Main Stupa, general view from N.-E.	12×10
29	"	Ditto ditto from S.-E.	"
30	"	Ditto ditto from S.-W.	"
31	"	Ditto ditto from N.-W.	"
32	"	Ditto steps from N.-W.	"
33	"	Stupas B ² and B ⁷ , general view from N.-E.	"
34	"	Main Stupa showing detail of mouldings from E.	"
35	"	Stupas N ² -N ¹³ , general view from N.-W.	"
36	"	Stupas J ² and J ³ , general view from N.-W.	"
37	"	Stupa J, general view from S.-W.	"
38	"	Chapel R ¹ , general view from S.-W.	"
39	"	Stucco sculptures in R ¹ , West face	$8\frac{1}{2} \times 6\frac{1}{2}$
40	"	Ditto ditto detail view, West side	"
41	"	Ditto ditto ditto S.-W. side	"
42	"	Ditto ditto ditto West side	"
43	"	Ditto ditto ditto North side	"
44	"	Ditto ditto ditto North-West side	"
45	"	Ditto ditto ditto West side	$6\frac{1}{2} \times 4\frac{1}{2}$
46	"	Stupas N ⁴ and N ⁶ , from N.-W.	12×10
47	"	Detail of Stupa N ⁴ , S.-W.	"
48	"	Steps in front of E, from N.-E.	$8\frac{1}{2} \times 6\frac{1}{2}$
49	"	Detail view of wall in chamber F ² , from E.	"
50	"	Detail of wall R ¹ to D ³ , from S.-W.	12×10
51	"	Detail of wall D ³ to D ⁴ , from S.-W.	"
52	"	Detail of wall of chamber M ² , S.-W. corner, outer side	"
53	"	Ditto ditto M ² , N.-E. corner, inner view	"
54	"	Miniature Stupa (CH. 587)	$8\frac{1}{2} \times 6\frac{1}{2}$
✓ 55	"	Relic casket (CH. 587)	"

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
✓ 56	Chir Tope. (Taxila).	Silver relic casket (CH. 587)	$6\frac{1}{2} \times 4\frac{3}{4}$
57	"	Beads (CH. 587)	$8\frac{1}{2} \times 6\frac{1}{2}$
58	"	Relic casket (CH. 588)	"
✓ 59	"	Gold relic casket (CH. 588)	$6\frac{1}{2} \times 4\frac{1}{2}$
60	"	Terracotta head (CH. 589)	$8\frac{1}{2} \times 6\frac{1}{2}$
61	"	Stucco head (CH. 496)	"
62	"	Duplicate	"
63	"	Stucco heads (CH. 567, 428)	$6\frac{1}{2} \times 4\frac{3}{4}$
64	"	Stucco head (CH. 568)	"
65	"	Ditto (CH. 566)	$8\frac{1}{2} \times 6\frac{1}{2}$
66	"	Portion of stucco torso	"
67	"	Stucco leg (CH. 255)	"
68	"	Complete stucco figures (CH. 174)	"
69	"	Stucco head (CH. 566)	"
70	"	Stucco heads (CH. 558 and 464)	$6\frac{1}{2} \times 4\frac{3}{4}$
71	"	Stucco head (CH. 615)	"
72	"	Ditto (CH. 284)	"
73	"	Stucco heads (CH. 635 and 381)	"
74	"	Stucco head (CH. 353)	$8\frac{1}{2} \times 6\frac{1}{2}$
75	"	Ditto (CH. 550)	$6\frac{1}{2} \times 4\frac{3}{4}$
76	"	Ditto (CH. 550)	"
77	"	Ditto (CH. 687)	"
78	"	Ditto (CH. 163)	"
79	"	Ditto (CH. 320)	"
80	"	Stucco heads (CH. 380 and 382)	"
81	"	Stucco head (CH. 427)	$8\frac{1}{2} \times 6\frac{1}{2}$
82	"	Ditto (CH. 686)	$6\frac{1}{2} \times 4\frac{3}{4}$
83	"	Clay seals from S ³	$8\frac{1}{2} \times 6\frac{1}{2}$
84	"	Stucco head (CH. 666)	"

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
85	Chir Tope. (Taxila).	Stucco head (CH. 609)	$8\frac{1}{2} \times 6\frac{1}{2}$
86	"	Gandhara female, headless (CH. 514)	"
87	"	Kanjur capital (CH. 132)	"
88	"	Gandhara capital (CH. 491)	"
89	"	Stucco head (CH. 50)	$6\frac{1}{2} \times 4\frac{1}{2}$
90	"	Miniature Stupa (CH. 655)	$8\frac{1}{2} \times 6\frac{1}{2}$
91	"	The same with umbrella	"
92	"	Stucco head (CH. 731)	"
93	"	Gandhara figurine (CH. 721)	$6\frac{1}{2} \times 4\frac{1}{2}$
94	"	Ditto figure (CH. 752)	$8\frac{1}{2} \times 6\frac{1}{2}$
95	"	Stone lamp ((CH. 730)	"
96	"	Stucco head (CH. 852)	"
97	"	Ditto (CH. 825)	"
98	"	Ditto (CH. 824)	"
99	"	Ditto (CH. 853)	$6\frac{1}{2} \times 4\frac{1}{2}$
100	"	Ditto (CH. 854)	"
101	"	Ditto (CH. 972)	"
102	"	Copper bowl (CH. 27)	$8\frac{1}{2} \times 6\frac{1}{2}$
103	"	Gandhara pillar (CH.)	"
104	"	Ditto sculpture (CH. 2009)	"
105	"	Ditto figure (CH. 2010)	"
106	"	Iron objects (CH. 725 to 878)	"
107	"	Gandhara figure (CH. 804)	"
108	"	Ditto (CH. 803)	"
109	"	Ditto (CH. 747)	"
110	"	Stucco head (CH. 770)	$6\frac{1}{2} \times 4\frac{1}{2}$
111	"	Gandhara figure (seated) ; (CH. 982)	$8\frac{1}{2} \times 6\frac{1}{2}$
112	"	Iron bolt (CH. 984)	"
113	"	Stucco heads (CH. 331, 309, 742 and 1027)	"

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
✓ 114	Chir Tope. (Taxila).	Relic casket (CH. 893)	8½ × 6½
✓ 115	"	Silver and gold relic caskets and beads (CH. 893)	6½ × 4½
116	"	Gandhara sculpture (CH. 811)	8½ × 6½
✓ 117	"	Relic casket from Stupa Q.	"
118	"	Gandhara female carrying water vessel (CH. 339)	"
119	"	Terracotta lamps (CH. 127, 175 and 306)	"
120	"	Gandhara figure (CH. 485)	6½ × 4½
121	"	Stucco head (CH. 525)	8½ × 6½
122	"	Ditto (CH. 501)	"
123	"	Ditto (CH. 524)	12 × 10
124	"	Gold objects (CH. 892)	8½ × 6½
✓ 125	"	Relic casket (CH. 941)	"
126	"	Gandhara sculpture (CH. 890)	"
127	"	Ditto (CH. 239)	"
128	"	Earthen cups (CH. 411 and 412)	"
129	"	Stone heads (CH. 698 and 478)	6½ × 4½
✓ 130	"	Earthen relic pot (CH. 121)	8½ × 6½
131	"	Stucco head (CH. 552)	6½ × 4½
132	"	Stucco heads (CH. 97 and 1025)	"
✓ 133	"	Steatite relic casket (CH. 950)	8½ × 6½
134-136	"	Crystal lion from different sides (CH. 950)	6½ × 4½
✓ 137	"	Relic vase from Stupa N. (CH. 1073)	8½ × 6½
138	"	Stucco atlantes (CH. 1075)	"
139	"	Ditto (CH. 1076)	"
140	"	Ditto (CH. 1077)	"
141	"	Gandhara sculpture (CH. 211)	"
142	Sirkap. (Taxila).	Survey plan of Taxila site	"
143	"	Rare and unique coins found in the year 1913-14	"
144	"	Ditto ditto another set	"

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
145	Sirkap. (Taxila).	Marble stone with Aramaic Inscription	$8\frac{1}{2} \times 6\frac{1}{2}$
146	"	Terracotta toys (S. K. 214, 215, 219, 221, 223 and 225)	"
147	"	Potteries (S. K. 35, 63, 64, 65, 69 and 237)	"
148	"	Ditto (S. K. 12, 17, 19, 117, 120, and 235)	"
149	"	Ditto (S. K. 60, 61, 67, 74, 176, 177 and 236)	"
150	"	Ditto (S. K. 5, 8, 9, 10, 110 and 111)	"
851	"	Ditto (S. K. 22 and 94)	"
152-153	"	Ditto (S. K. 42, 62, 65, 66, 70, 175; 16, 29, 178)	"
154	"	Pottery (S. K. 224)	"
155-156	"	Potteries (S. K. 96, 109, 173, 174; 218, 220, 229)	"
157-162	"	Ditto (S. K. 237, 227, 234, 288)	"
163	"	Ditto (S. K. 179, 180, 181)	"
164	"	Ditto (S. K. 171, 172)	"
165	"	Pottery (S. K. 2)	"
166	"	Ditto (S. K. (232)	"
167	"	Stucco head of Buddha, broken (S. K. 1)	"
168	"	Stone relic casket	"
169	"	Stone objects (S. K. 1, 2, 10)	"
170	"	Stone torso of male figure (S. K. 9)	"
171	"	Stone lamp (S. K. 8)	"
✓ 172	"	Steatite relic casket (S. K. 30)	"
173	"	Four stone objects (S. K. 21, 22, 28, 31)	"
174	"	Three stone objects (S. K. 20, 24, 27)	"
175	"	Bear's head with handle, Bactrian camel, antimony case and gilt rod (S. K. 1, 16, 113, 116).	"
176	"	16 small copper objects (S. K. 21, 23, 24, 25, 31, 90, 105, 107, 104, 111, 115, 112, 120, 121, 114, 122).	"
177	"	Four copper rings and other copper objects (S. K. 26, 62, 94, 44, 45, 101, 29, 63, 99, 92, 61, 103).	"
✓ 178	"	Inkpot and casket (S. K. 12, 13)	"
179	"	Two copper goblets. (S. K. 71, 72)	"

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
180	Sirkap. (Taxila).	One copper goblet (S. K. 72)	8½ × 6½
✓ 181	"	Copper casket with lid (S. K. 74)	"
182	"	Copper lamp (S. K. 73)	"
183	"	Four copper objects (S. K. 17, 19, 81, 89)	"
184	"	Nine copper objects (S. K. 47, 42, 110, 37, 87, 4, 7, 2, 5)	"
185	"	Iron tripod (S. K. 15)	"
186	"	Eight iron objects (S. K. 23, 41, 39, 27, 65, 49, 48, 50) .	"
187	"	Twelve iron objects (S. K. 56, 80, 79b, 62, 79a, 74, 72, 31, 53, 20, 21, 54).	"
188	"	Nine iron objects (S. K. 21, 22, 63, 26, 47, 22, 27, 21, 77)	"
189	"	Iron stand (S. K. 17)	"
190	"	Iron clamp with four nails intact (S. K. 81)	"
191	"	Eight iron objects (S. K. 33, 38, 66, 36, 71, 37, 59) .	"
192	"	Five iron objects. (S. K. 19, 61, 18, 64, 52)	"
193	"	Six iron objects (S. K. 46, 42, 44, 78, 70, 43)	"
194	"	Weights and plates (S. K. 51a, 51b, 51c, 35, 29, 30, 45, 69).	"
195	"	Twelve iron objects (S. K. 21, 55, 72, 76, 68, 60, 67, 21, 41, 40, 57, 75).	"
196	"	Iron tripod broken (S. K. 16)	"
197	"	Two horns with holes from bridle and one carved bone tube (S. K. 56, 57, 158).	"
198	"	Three dice and other bone objects (S. K. 65, 142, 44, 152, 63, 62, 152, 140, 159).	"
199	"	Apsidal temple from S.-W.	12 × 10
200	"	Kunala Stupa from N.-W.	"
201	"	Ditto from N.-W.	8½ × 6½
202	"	Main street from S.-S.-W.	"
203	"	Cross walled Stupa in Block E from S.-E.	12 × 10
204	"	North section of street from N.-N.-W.	8½ × 6½
205	"	Block F from N.-E.	"
206	"	Apsidal temple from S.-W.	"

APPENDIX D—*contd.*

No.	Name of Place.	Description	size.
207	Sirkap. (Taxila)	Main street from S.	12 x 10
208	"	Apsidal temple from N.-W.	8½ x 6½
209	"	Block D from S.-E.	"
210	"	Cross walled Stupa in Block E from S.-E.	"
211	"	Ditto, ditto from N.-E.	"
212	"	Main street from S.	"
213	"	Doorway of a chamber in Block P.	"
214	"	Ditto, ditto, another view	"
215	"	Foundation of city wall with footings from S.-E.	"
216	"	Cross section showing the core of the city wall from S.-E.	"
217	"	1st Bastion beyond S. Sirkap from S.-E.	"
218	"	Ditto showing later additions from N.-E.	"
219	"	Another Bastion from E.-S.-E.	"
220	"	Ditto foundation with footings from N.-E.	"
221	"	Kunala Stupa, before excavation, from S.-E.	"
222	"	Ditto after excavation, from N.-E.	"
223	"	Ditto from N.-W.	"
224	"	Ditto details of base mouldings from N.-W.	"
225	"	Ditto general view from S.-W.	"
226	"	City wall and bastion at S.-E. corner	"
227	"	Copper seals	6½ x 4½
228	Bhalar Stupa (Taxila).	View of Stupa showing detail of wall from S.-S.-E.	12 x 10
229	"	General view from E.	"
230	"	Stupa plinth from S.-W.	"
231	"	Bhalar Stupa, general view from S.-W.	"
232	"	Ditto steps from N.-E.	"
233	"	Ditto general view from W.	"
234	"	Ditto ditto S.-W.	"
235	"	Ditto ditto N.-E.	"

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
236	Indian Museum Sculpture.	Statue of Vishnu from Sareshadgha, District 24-Parganas, Bengal.	8½ × 6½
237	"	Statue of Bodhisattva perhaps Manjusri, perhaps found at Bodh Gaya, purchased from the late Mr. J. D. M. Beglar.	"
238	"	Statue of Bodhisattva (?) from Bihar	"
239	"	Ditto Tara from Bihar	"
240	"	Ditto Bodhisattva Lokanatha from Bihar	"
241	"	Ditto Vishnu from Murshidabad, Bengal	"
242	"	Ditto Bodhisattva Lokanatha (?) with four arms, from Bihar.	"
243	"	Statue of Kali found in Bihar	"
244	"	Ditto Ganesa from Java	"
245	"	Ditto Potalaka-upatara, according to the inscription, from Bihar.	"
246	"	Statue of Siva-durga perhaps from Konarak	"
247	"	Ditto Vagisyari (Goddess of learning), from Bargaon or Nalanda, Patna District.	"
248	"	Statue of Tara from Bihar	"
249	"	Ditto Bodhisattva Lokanatha (?) from Kurkihar, Gaya District.	"
250	"	Statue of Buddha wearing jewels from Bihar	"
251	"	Ditto Jambhala the God of riches from Bihar	"
252	"	Ditto Bodhisattva Lokeshvara (?) from Bihar	"
253	"	Ditto Buddha with Indra and Brahma: the descent from the Heaven of the 33 gods from Kurkihar, Gaya District.	"
254	"	Statue of Durga from Orissa. (?)	"
255	"	The figure of seven mothers with an inscription below each mentioning the name of the figure, from Bihar.	"
256	"	Image of Bodhisattva Vajrapani from Bihar	"
257	"	Ditto Bodhisattva Manjusri from Bihar	"
258	"	The nine planets from Bihar	"
259	"	Head of Bodhisattva from Sankisa	"
260	"	Ganesa dancing, from Dinajpur District, Bengal	"

APPENDIX D—*contd.*

No.	Name of Place.	Description.	Size.
261	Indian Museum Sculpture.	Image representing the incident of the mad elephant, from Bodh Gaya.	8½ x 6½
262	"	Statue of Durga called Pundesvara in the inscription, from Bihar.	"
263	"	New form of Marichi, purchased from the late Mr. J.D.M. Beglar, probably from Bodh Gaya.	"
264	"	Ushnisha Vijaya Tara from Bihar	"
265	"	Statue of Suryya perhaps from Gaur	"
266	"	Ditto Suryya from Bihar	"
267	"	Ditto Bodhisattva Lokanatha (?) from Kurkihar, Gaya District.	"
268	"	Statue of Durga, perhaps from Gaur	"
269	"	Image of Vishnu from Bengal (?)	"
270	"	Ditto Tara from Bihar	"
271	"	Fragment of Terracotta plaque from Bodh Gaya the figures extant being those of the Buddha Gautama and the future Buddha Maitreya. Purchased from the late Mr. J. D. M. Beglar, probably from Bodh Gaya.	"
272	"	Miniature chaitya from Bihar	"
273	"	Panel of chaitya with Buddha seated in the attitude of turning the wheel of law, perhaps from Bihar.	"
274	"	Imitation of Svayambhu chaitya in Nepal, from Bihar .	"
275	"	Image of Vishnu, probably from Bihar	"
276	"	Ditto from Sunderbans, below Calcutta	"
277	"	Statue of Suryya from Gaur	"
278	"	Prajnaparamita from Bihar	"
279	"	Statue of Bodhisattva Lokanatha with six arms from Bihar.	"
280	"	Miniature Stupa with five Dhyanī Buddha figures from Bihar.	"
281	"	Statue of Marichi from Bihar	"
282	"	Ditto Vishnu from Gaur. (?)	"
283	"	Ditto Buddha with Indra and Brahma : the descent from the Heaven of the 33 gods, from Bihar.	"
284	"	Ditto Bodhisattva from Bihar	"

APPENDIX D—*conclâ.*

No.	Name of Place.	Description.	Size.
285	Indian Museum Sculpture.	Crowned Buddha from Bihar	8½ × 6½
286	"	Sculptured stone in the Bharhut gallery	12 × 10
287	"	Ditto.	"
288	"	Ditto.	"
289	"	Ditto.	"
290	"	Ditto.	"
291	"	Bidala Jataka and Kukkuta Jataka	"
292	"	Monkey scene (Mahakapijataka).	"
293	"	Sculptured stone in the Bharhut gallery	"
294	"	Ditto.	"
295	"	Uda Jataka	"
296	"	Naga Jataka	"
297	Miscellaneous.	Harappa seals	6½ × 4½
298	"	Inscribed swords in the possession of Nawab Nasr Ullah Khan of Bhopal.	"
299	"	Ditto Ditto.	8½ × 6½
300	"	Close view of same	"
301	"	Ditto.	"

APPENDIX E.

Report of the Archaeological Section of the Indian Museum, 1914-15.

Establishment.—Dr. D. B. Spooner, B.A., Ph.D., F.A.S.B., Superintendent, Archaeological Survey, Eastern Circle, remained as my deputy in charge of the Archaeological Section from the beginning of the year to the 25th June, 1914, and again from the 12th December, 1914, to the end of the financial year. Mr. R. D. Banerji, M.A., Assistant Superintendent, Archaeological Survey, remained as my deputy during the rest of the year. There were no additions to or changes in the staff of this Section.

2. *Leave.*—Dr. D. B. Spooner, my deputy in charge of the Archaeological Section of the Indian Museum, was absent on leave from the 25th June to the 11th December, 1914, both days inclusive.

3. *Library.*—One hundred and ninety-two books were added to the Archaeological library during the year. Of these one complete set of the Sacred Books of the East and twenty-two others were purchased. The rest were received as donations.

At the request of the Officer-in-charge, Mahamahopadhyaya Dr. Satis Chanda Vidyabhusana, M. A., Ph.D., Principal, Government Sanskrit College, Calcutta, has very kindly supplied three

APPENDIX E—*contd.*

parts of the Descriptive Catalogue of Sanskrit Manuscripts in the Calcutta Sanskrit College, which were missing in the set belonging to this office.

During the latter half of the year Pandit B. B. Bidyabinod was engaged in compiling an alphabetical card index of the books in the library of the Section.

4. *Photographs*.—One thousand eight hundred and sixty-eight photographic prints were received during the year from the different circles of the Archaeological Department, as well as from the office of the Director General of Archaeology in India.

5. *Galleries*.—Six large show-cases designed by Mr. Percy Brown, A.R.C.A., of the Government School of Art, Calcutta, were purchased during the year for the new galleries recently vacated by the Victoria Memorial Exhibition. In March, 1915, the Government of India made a special grant of Rs. 20,000 to the trustees for furnishing this Gallery. Wall cases and free standing show-cases have been designed for the purpose by Mr. Percy Brown and at the end of the year the work was progressing very rapidly. It is hoped that the new gallery will be completely furnished and arranged during the coming year.

The duplicate collection of Gandhara images were examined by Mr. R. D. Banerji and myself in November, 1914, and shelves were constructed for them in the godowns under the new wings of the Museum.

6. *Coin-room*.—Mr. R. D. Banerji, the Assistant Superintendent, remained in charge of the coin-room, throughout the year. He was mainly engaged in selecting coins for the next volume of the coin catalogue and in choosing duplicate coins for the Delhi Museum of Archaeology. At the request of the Government of India the Trustees consented to present a set of duplicate Indian Muhammadan coins to the Delhi Museum. The first batch numbering 700 coins were made over in December, 1914, to Mr. Zafar Hasan, Assistant Superintendent, Archaeological Survey, Muhammadan and British Monuments, who had come to Calcutta to receive them. The selection of duplicate coins was not finished during the year. Coins of South India and Mysore were sent to Dr. J. R. Henderson of the Madras Museum, and Hyderabad coins to Mr. Ghulam Yazdani, Superintendent of Archaeology, Nizam's Dominions, for cataloguing. Coins of the North-West Frontier are being catalogued by Mr. S. E. Pears, I.C.S., Political Agent, North-West Frontier Province.

A large find of punch-marked silver coins made in the Purneah District were cleaned and classified during the year, and an account of them will be published in the Annual Report of the Archaeological Department.

7. *Prehistoric Antiquities*.—The catalogue of prehistoric antiquities belonging to this Museum by Mr. J. Coggin Brown, M.Sc., F.G.S., was completed during the year. It is expected that the book will be published in the early part of the ensuing year.

8. *Treasure Trove*.—The following finds of Treasure Trove coins were dealt with during the year :—

- (1) 2,873 silver punch-marked coins found in a river bed in the Purneah District of Bihar and Orissa, which had been received during the previous year. These coins have been cleaned and classified during this year.
- (2) Eight silver coins of a hitherto unknown king named Sudama. The fabric of these coins shows that they belong to the 7th or 8th century A.D. They are later imitations of Sassanian Coinage. An account of these coins will be published in the Annual Report of the Archaeological Department. These coins were found in Pargana Pichhore of the Gwalior State.
- (3) Two silver punch-marked coins found in the Pargana Nahargarh of the Gwalior State. These coins were sent for examination by the Resident in Gwalior.
- (4) Four silver and 48 copper coins found in the Dewas State. The silver coins were found to be unique full, half, quarter and one-eighth tankas of Mahmud II of

APPENDIX E—*contd.*

Malwa. The copper coins were issues of Ahmad I and Mahmud I of Gujarat, Hoshang Ghorī, Ghiyas Shah, Nasir Shah and Mahmud II of Malwa, and Husain Shah Sharqi of Jaunpur. Received from the Agent to the Governor General in Central India.

- (5) Four silver and one copper coin found in the Nagod State, Central India. The silver coins were issues of the Pratihara Emperor Bhoja I.
- (6) Eight copper coins found in the Nagod State. This find contained :—
- (a) Copper Adivaraha Type coins.
 - (b) Copper coins of Muhammad-bin-Sam.
 - (c) Copper coins of Shamsuddin Altamish.

These coins were a part of a large hoard consisting of 559 coins which were sent later on for examination. These coins were cleaned and distributed during the year.

- (7) Twelve silver coins of the East India Company issued in the name of Shah Alam II, found in the Sambalpur District, sent for examination by the Superintendent, Archaeological Survey, Eastern Circle.
- (8) Ten copper coins of the Sharqi dynasty of Jaunpur sent for examination by Hon'ble Mr. E. A. Gait, I.C.S., through the Superintendent, Archaeological Survey, Eastern Circle.

9. *New accessions.*—The following additions were made to the Archaeological Collections :—

(i) *Miscellaneous* :—

- (a) Mr. F. H. Gravely, M.Sc., Assistant Superintendent, Zoological and Anthropological Section, Indian Museum, presented one small terracotta and three fragments of a copper vessel discovered at Parambikulam in the Cochin State.
- (b) Nineteen boxes containing prehistoric antiquities found in the Tinnevely District of the Madras Presidency were presented by the Government of Madras, and were received through the Superintendent, Government Museum, Madras, during the year.
- (c) One dancing Siva of bronze of the South Indian type was purchased and presented by the Director General of Archaeology. These antiquities will be displayed in the new gallery.

(ii) *Coins.*—Altogether 159 coins were added to the cabinet during the year—33 gold, 84 silver 36 copper, 2 billon and 4 lead. No coins were purchased during the year. Coins were received from the Government of Bombay (through the Bombay Branch, Royal Asiatic Society), Madras, United Provinces and Central Provinces. No coins were received from the Governments of the Punjab or Bihar and Orissa. Presentations of coins were also received from the Darbars of Tippera and Gwalior. Mr. O. Halden presented a copper coin of the Gwalior State and Mr. Choong Sang a silver dollar of the New Chinese Republic.

Below is a classified list of coins added to the cabinet :—

Class.	Gold.	Silver.	Copper.
Ancient India . . . . .	...	2	...
Bahmani Sultans	2	...	25
South Indian	8	...	Lead—4
Foreign	1	3	...
English and French East India Companies.	...	4	...

APPENDIX E—*concl'd.*

Class.	Gold.	Silver.	Copper.
Native States	1	3	1
Mughal	2	54	3
Sultans of Malwa	12	4	...
Sultans of Bengal	1	...	...
Sultans of Jaunpur	2	...	...
Sultans of Kashmir	1	...	...
Sultans of Gujarat . . . . .	...	1	4
Miscellaneous	1	12	...
Sultans of Delhi	2	1	3
			Billon—2
TOTAL	33	84	36 Billon 2 Lead 4

SIMLA;
26th July 1915.

}

JOHN MARSHALL,
Director General of Archaeology in India.

Honorary Correspondents of the Archæological Department.

1. Archaeological Commissioner for Ceylon, Anuradhapura.
2. Monsieur M. A. Barth, Membre de l'Institut, 10, Rue Garancière (Paris VI^e), France.
3. H. C. P. Bell, Esq., late Archæological Commissioner, Candy, Ceylon.
4. Sir R. G. Bhandarkar, K.C.I.E., Sangam, Poona, India.
5. C. O. Blagden, Esq., Redcourt, Champion Hill, London, S.E.
6. Dr. James Burgess, C.I.E., LL.D., 22, Seton Place, Edinburgh.
7. Hon'ble Mr. R. Burn, Chief Secretary, United Provinces, India.
8. Dr. A. K. Coomaraswamy, The Manor House, Britford, Nr. Salisbury, England.
9. H. Cousens, Esq., c/o Messrs. Grindlay and Co., 54, Parliament Street, London.
10. Lord Curzon of Kedleston, 1, Carlton House Terrace, London, S.W.
11. Director of Archaeology in Netherlands India, Batavia.
12. Directeur de l'École Française d'Extrême Orient, Hanoi, Indo-China.
13. Monsieur L. Finot, 11, Rue Poussin, Paris (XVI^e), France.
14. Dr. J. F. Fleet, C.I.E., Ph.D., 8, Leopold Road, Ealing, London, W.
15. Monsieur A. Foucher, 16, Rue de Staël, Paris (XV^e), France.
16. Sir George Grierson, K.C.I.E., Ph.D., Rathfarnham, Camberley, Surrey, England.
17. Lieutenant-Colonel T. W. Haig, His Britannic Majesty's Consulate General, Isfahan, Persia.
18. Dr. A. F. Rudolf Hærnle, C.I.E., Ph.D., 8, Northmoor Road, Oxford.
19. G. R. Kaye, Esq., Curator, Bureau of Education, Simla.
20. Professor H. Kern, Utrecht, Holland.
21. Professor Sten Konow, Ph.D., Villa Vaikuntha, Bestum, *viâ* Christiania, Norway.
22. Pandit Hira Lal, Raj Bahadur, Extra Assistant Commissioner, Nagpur, India.
23. Dr. C. R. Lanman, Harvard University, 9, Farrar Street, Cambridge, Massachusetts, U.S.A.
24. Professor Sylvain Lévi, Professor, Collège de France, Rue Guy-de-la Brasse 9, Paris, France.
25. Major C. E. Luard, Foreign Department, Government of India.
26. Professor A. A. Macdonell, M.A., Ph.D., Lochgarry Lodge, Banbury Road, Oxford.
27. Shams-ul-ulama Jivanji Jamshedji Modi, B.A., Honorary Secretary, Anthropological Society of Bombay, Bombay, India.
28. Mr. R. Narasimbachar, M.A., Officer-in-charge of Archæological Researches, Mysore, Malleswaram, Bangalore, India.
29. F. E. Pargiter, Esq., 12, Charlbury Road, Oxford.
30. Professor E. J. Rapson, 8, Mortimer Road, Cambridge.
31. Professor T. W. Rhys-Davids, Harboro' Grange, Ashton-on-Mersey, Cheshire, England.
32. Mahamahopadhyaya Pandit Haraprasad Shastri, 26, Pataldanga Street, Calcutta.
33. Monsieur E. Senart, Membre de l'Institut, 18, Rue Francis I, Paris, France.
34. R. Sewell, Esq., 51, Bedford Gardens, Campden Hill, Kensington, London, W.
35. Professor Sergius d'Oldenburg, Secretary, Imperial Academy of Sciences, Petrograd, Russia.
36. Vincent A. Smith, Esq., 116, Banbury Road, Oxford.
37. Professor J. Takakusu, Imperial University, Tokio, Japan.
38. Sir Richard Temple, Bart., C.I.E., The Nash, Worcester, England.
39. F. W. Thomas, Esq., India Office Library, Whitehall, London, S. W.
40. Professor M. Van Berchem, Geneva University, Geneva, Switzerland.
41. Prof. J. Ph. Vogel, Ph.D., Leiden University, Leiden, Holland.
42. Dr. A. Venis, C.I.E., Superintendent of Sanskrit Studies, United Provinces, Benares.
43. Colonel L. A. Waddell, C.B., C.I.E., The Deodars, Park Drive, Hampstead, London, N. W.

*List of Public Institutions, Libraries, etc., to which
copies of Archæological Survey Reports are regularly supplied.*

I.—COUNTRIES OUTSIDE INDIA.

UNITED KINGDOM.

Aberdeen University Library, Aberdeen.
 Royal Library, Windsor Castle, Berks.
 Birmingham University Library.
 Bendall Library, Cambridge.
 Cambridge University Library, Cambridge.
 National Library of Ireland, Leinster House,
 Kildare Street, Dublin.
 Royal Irish Academy, 19, Dawson Street,
 Dublin.
 Trinity College Library, Dublin.
 Advocates' Library, Edinburgh.
 University Library, Edinburgh.
 Royal Society, Edinburgh.
 Royal Scottish Museum, Edinburgh.
 Society of Antiquities, of Scotland, National
 Museum of Antiquities, Queen Street, Edin-
 burgh.
 Glasgow University Library, Glasgow.
 British Museum Library, Great Russel Street,
 Bloomsbury, London, W. C.
 Folklore Society, 11, Old Square, Lincoln's Inn,
 London, W. C.
 India Office Library, London, S.W.
 Imperial Institute, London, S.W.
 Library of the Oriental Department of the
 British Museum, London, W.C.

London Library, St. James' Square, London,
 S. W.
 London University Library, Imperial Institute,
 London, S.W.
 National Art Library, South Kensington
 Museum, London.
 Royal Academy of Arts, Burlington House,
 Piccadilly, London, W.
 Royal Anthropological Institute of Great
 Britain and Ireland, 50, Great Russell Street,
 London, W. C.
 Royal Asiatic Society, 22, Albemarle Street,
 London, W.
 Royal Colonial Institute, Northumberland
 Avenue, London, W.C.
 Royal Institute of British Architects, 9, Conduit
 Street, Hanover Square, London, W.
 Royal Society, Burlington House, Piccadilly,
 London, W.
 Society of Antiquaries of London, Burlington
 House, Piccadilly, London, W.
 Society for the Protection of Ancient Buildings,
 10, Buckingham Street, Adelphi, London,
 W.C.
 Society for the Promotion of Hellenic Studies,
 London.
 Bodleian Library, Oxford.
 Indian Institute, Oxford.

FRANCE.

Bibliothèque Nationale, Paris.
 Bibliothèque J. Doucet, 19, Rue Spontini,
 Paris.
 Directeur Général de l'Union Coloniale
 Française, 44, Chaussée d'Antin, Paris.
 L'École spéciale des Langues Orientales
 Vivantes, Paris.
 Institut de France, Paris.

Institut Ethnographique International de Paris,
 28, Rue Bonaparte, Paris.
 Musée Guimet, 7, Place d'Iéna, Paris.
 Revue Archéologique, 28, Rue Bonaparte,
 Paris.
 Société Asiatique, 1, Rue de Seine, Paris.
 Université de Lyons.

ITALY.

R. Biblioteca Nazionale, Centrale di Firenze,
 Italy.
 Società Asiatica Italiana, Firenze, Italy.
 American School of Classical Studies at Rome.

Biblioteca Nazionale, Vittorio Emanuele, Rome.
 British School at Rome, Palazzo Odescalchi,
 Piazza S.S. Apostoli, Rome.

HOLLAND.

Koninklijke Akademie van Wetenschappen te Amsterdam, Holland.	Koninklijk Instituut van Nederlandsch Indi, The Hague, Holland.
--	--

RUSSIA.

Imperial Academy of Sciences (for the Asiatic Museum), Petrograd, Russia.

DENMARK.

National Museum, Copenhagen, Denmark.	| Royal Library, Copenhagen, Denmark.
---------------------------------------	-------------------------------------

BELGIUM.

Academie Royal d'Archeologie de Belgique, Anvers.

SWEDEN.

University Library, Upsala, Sweden.

NORWAY.

University Library, Christiania.

GREECE.

British School at Athens, Greece.	| La Société Archeologique d'Athènes, Athens.
-----------------------------------	---

JAPAN

President, Asiatic Society of Japan, Tokio.

CHINA.

North China Branch of the Royal Asiatic Society, Shanghai.

AMERICA.

Field Museum of Natural History, Chicago, U.S.A.	American Philosophical Society, Philadelphia.
American, Oriental Society, 235, Bishop Street, New Haven, Conn., U. S. A.	Secretary, National Museum, Washington, U. S. A.
Free Library of Philadelphia, U. S. A.	Smithsonian Institution, Washington, D. C., U. S. A.

SIAM.

Vajiranana National Library, Bangkok.

BRITISH COLONIES.

Royal Asiatic Society, Ceylon Branch, Colombo.	Literary and Historical Society, Quebec, Canada.
The Museum, Canterbury, New Zealand.	University Library, Sydney, New South Wales.
Melbourne Library, Melbourne, Australia.	Straits Branch, Royal Asiatic Society, Singapore.
Victoria Public Library, Perth, Western Australia.	

FOREIGN COLONIES.

Bataviaasch Genootschap van Kunsten en Wetenschappen, Batavia.	L'Ecole Française d'Extrême Orient, Hanoi, Indo-Chine.
L'Institut Français, d'Archéologie Orientale du Caire, Cairo, Egypt.	Ethnological Survey for the Philippine Islands, Department of Interior, Manila.
Museum of Arabic Art, Cairo, Egypt.	

II.—INDIA.

(1) IMPERIAL.

Central Library, Army Headquarters, Simla.	Imperial Library, Calcutta.
Department of Education Library, Delhi.	Indian Museum, Calcutta.

(2) PROVINCIAL.

MADRAS.

The Government College, Kumbakonam.	Noble College, Masulipatam.
Christian College Library, Madras.	The Sanskrit College, Mylapore.
Government Central Museum, Madras.	The Government College, Rajahmundry.
Pachaiyappa's College, Madras.	The Teachers' College, Saidapet, Chingleput District.
Presidency College, Madras.	St. Joseph's College, Trichinopoly.
Public Library, Madras.	S. P. G. College, "
School of Art, Madras.	Maharajah's College, Trivandrum.
Secretariat Library, Fort St. George.	The Sanskrit College, Trivadi.
University Library, Madras.	Maharajah's College, Vizianagram.
St. Aloysius College, Mangalore.	

BOMBAY.

Gujarat College, Ahmedabad.	School of Art, Bombay.
Bombay Branch of the Royal Asiatic Society, Town Hall, Bombay.	University Library, Bombay.
Elphinstone College Bombay.	Wilson College, Bombay.
Prince of Wales Museum, Bombay.	The College of Science, Poona.
St. Xavier's College, Bombay.	Deccan College, Poona.
Secretariat Library, Bombay.	Fergusson College, Poona.

BENGAL.

Wesleyan Mission College, Bankura.	Chaitanya Library, 4-1, Beaden Street, Calcutta.
Barisal Public Library, Barisal.	Church Mission Society, Calcutta.
Burdwan Raj Public Library, Burdwan.	Economic Museum, Calcutta.
Asiatic Society of Bengal, 57, Park Street, Calcutta.	Editor, Bengal Past and Present, Kidderpore Vicarage, Calcutta.
Bangabasi College, Calcutta.	Goethals' Indian Library, 30, Park Street, Calcutta.
Bengal Chamber of Commerce, Calcutta.	Government School of Art, Calcutta.
Bangiya Sahitya Parishad Sabha, Calcutta.	Library of the United Service Club, Calcutta.
Bethune College, Calcutta.	L. M. S. College, Bhowanipur, Calcutta.
Calcutta Historical Society, Calcutta.	Mahabodhi Society, Baniapooker Lane, Calcutta.
Calcutta University Institute, College Square, Calcutta.	

BENGAL—*contd.*

Metropolitan Institution, Calcutta.	Dacca College.
Presidency College Library, 1, College Square, Calcutta.	Northbrook Hall Library, Dacca.
Sanskrit College Library, 1, College Square, Calcutta.	Provincial Library, Dacca.
Scottish Churches College, Calcutta.	Jugannath College, Dacca.
Secretariat Library, Writers' Buildings, Calcutta.	Krishnagar College, Krishnagar.
University Library, The Senate House, Calcutta.	Daulatpur Hindu Academy, Khulna.
Hogghly College, Chinsura.	Midnapur College, Midnapur.
Chittagong College.	Narail Victoria College, Narail.
Beer Chandra Public Library at Comilla.	Rajshahi College, Rajshahi.
	Varendra Research Society, Rajshahi.
	Serampore College, Serampore.
	Civil Engineering College, Sibpur.

BIHAR AND ORISSA.

Bihar National College, Bankipore.	Patna College, Bankipore.
Bihar and Orissa Secretariat Library.	Ravenshaw College, Cuttack.
Bihar School of Engineering, Bankipore.	St. Columba's College, Hazaribagh.

UNITED PROVINCES.

Agra College, Agra.	University Library, Allahabad.
Palace Library of the Most Revd. the Archbishop at Agra.	Carmichael Library, Benares.
St. John's College, Agra.	Central Hindu College, Benares.
Lyall Library, Aligarh.	Queen's College, Benares.
M. A. O. College Library, Aligarh.	Sanskrit College, Benares.
Christian College, Allahabad.	Christ's Church College, Cawnpore.
Muir Central College, Allahabad.	Fyzabad Museum, Fyzabad.
Panini Office, Allahabad.	Canning College, Lucknow.
Public Library, Allahabad.	Provincial Museum Library, Lucknow.
Secretariat Library, Public Works Department, Allahabad.	Public Library, Lucknow.
	Lyall Library, Meerut.
	Archaeological Museum, Muttra.

Thomason College, Roorkee.

PUNJAB.

Khalsa College, Amritsar.	Islamia College, Lahore.
Aitchison College, Lahore.	Museum Library, Lahore.
Central Training College, Lahore.	Punjab Historical Society, Lahore.
Dyal Singh College, Lahore.	Punjab Public Library, Lahore.
Dayanand Anglo-Vedic College, Lahore.	Secretariat Library, Public Works Department, Lahore.
Forman Christian College, Lahore.	University Library, Lahore.
Government College Library, Lahore.	

DELHI.

The Museum of Archaeology, Delhi.	1 Public Library, Delhi.
	St. Stephen's College, Delhi.

NORTH-WEST FRONTIER PROVINCE.

Peshawar Museum, Peshawar.

Secretariat Library, Peshawar.

BURMA.

Myanma Awba Club, Kyaiklat, Pyapon District.

Mandalay Public Library, Mandalay.

Buddhist Library, Nathinggyaung, Bassein District.

Buddhist Propaganda Society, Pegu.

Young Men's Buddhist Association, Pegu.

Baptist College, Rangoon.

Bernard Free Library, Rangoon.

Burma Research Society, Rangoon.

Cedi Yengana Association Library, Shwe Dagon Pagoda, Rangoon.

Phayre Museum, Rangoon.

Rangoon College, Rangoon.

Rangoon Literary Society, Rangoon.

Secretariat Library, Rangoon.

Soolay Pagoda Library, Rangoon.

Teachers' Institute, Rangoon.

Young Men's Buddhist Association, Rangoon.

Office of Trustees of the Shwe Dagon Pagoda, Rangoon.

ASSAM.

Cotton Library, Dhubri.

Cotton College, Gauhati.

Curzon Hall Library, Gauhati.

Government Library, Shillong.

Secretariat Library, Shillong.

Victoria Jubilee Library, Tezpur.

CENTRAL PROVINCES.

Public Library of Amraoti Town.

High School Committee, Balaghat.

Government College, Jubbulpore.

Training College, Jubbulpore.

Jagannath High School, Mandla.

Hislop College, Nagpur.

Morris College, Nagpur.

Museum Library, Nagpur.

Secretariat Library, Nagpur.

Victoria Technical Institute Library, Nagpur.

Public Library, Saugor.

Victoria Library, Seoni.

COORG.

The Chief Commissioner of Coorg's Library, Bangalore.

(3) NATIVE STATES.

Mysore.

Central College, Bangalore.

Indian Institute of Science, Bangalore.

Maharaja's College, Mysore.

Hyderabad.

The Resident's Library, Hyderabad.

Gwalior.

Gwalior Durbar Library, Gwalior.

Central India.

Dhar Museum Library, Dhar.

Library of the Agent to the Governor-General, Indore.

Office of the Public Works Secretary to the Agent to the Governor-General, Central India.

Rajkumar College, Indore.

Rajputana.

College Library, Ajmer.

| Rajputana Museum, Ajmer.

Library of the Chief Commissioner and Agent to the Governor-General, Ajmer.

Baroda.

Library of the Resident at Baroda.

| Baroda Museum.

Kathiawar.

Sir Bhagwatsingji Library, Gondal (Kathiawar). | Watson Museum of Antiquities, Rajkot.

Chamba.

Bhuri Singh Museum, Chamba.

Travancore.

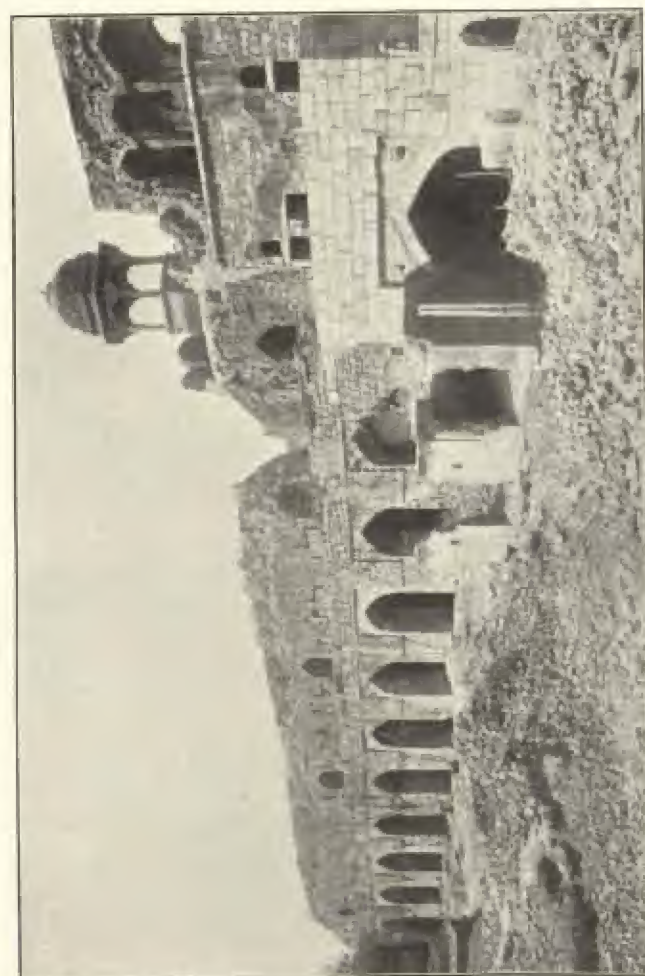
Travancore Durbar Library.



a. SOUTH GATE OF ALTAMASH'S COURT, QUTB.



b. EAST GATE OF QUTB MOSQUE, EXCAVATED.



c. INTERIOR OF CITY WALL, PURANA QILA.



d. RUINS AT HAUZ KHAS, DELHI.

ROCK-CUT TEMPLE, MASRUR.



a. SOUTH-EAST COURT BEFORE EXCAVATION.

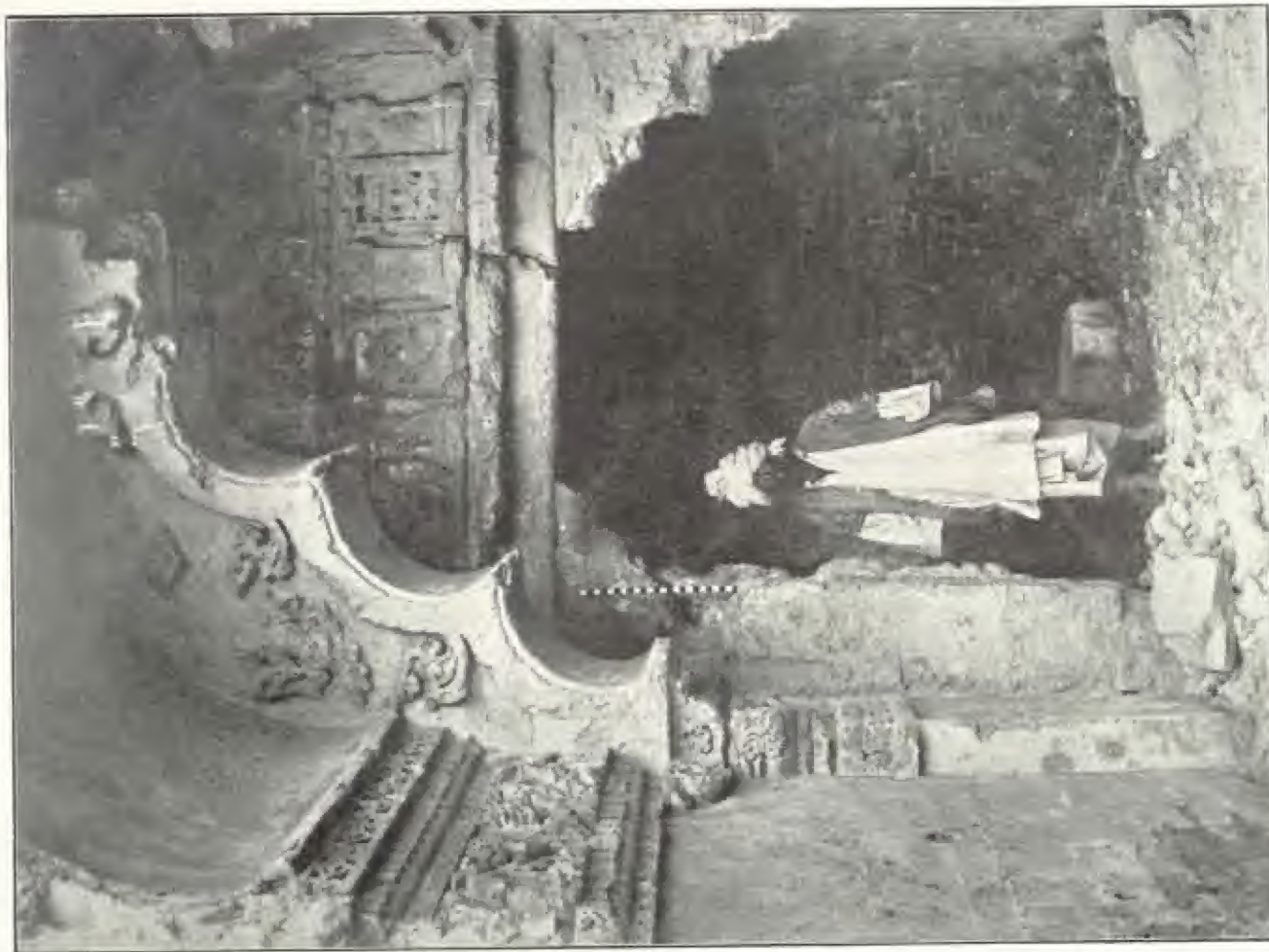


b. RECENTLY EXCAVATED LINTEL WITH ARHISHEKA OF LAKSHMI.

BILOT: KAFIRKOT.



a. TEMPLE C FROM SOUTH.

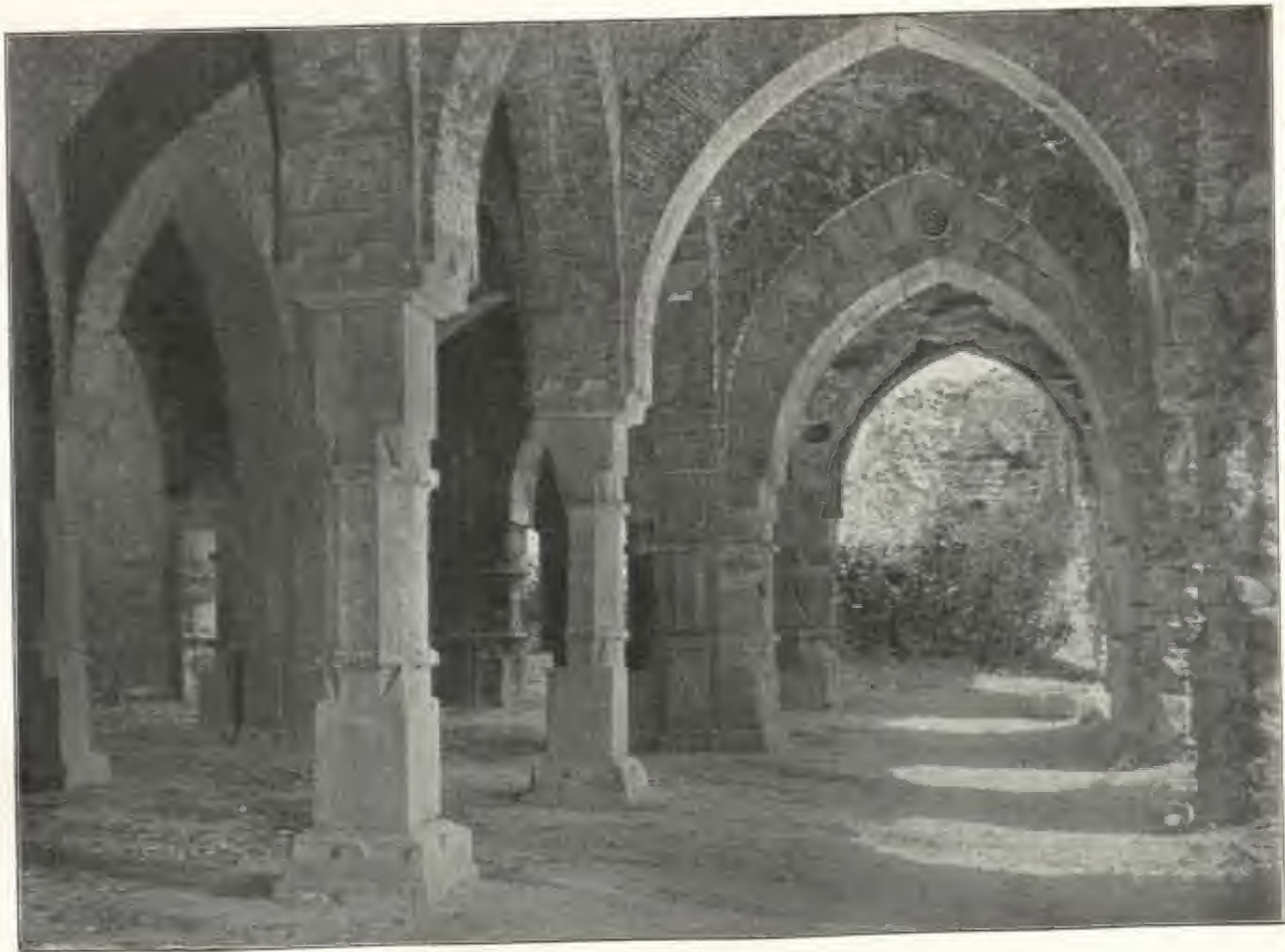


b. INTERIOR OF PORCH OF TEMPLE C.

Photo-Radiograph is printed in the offices of the Survey of India, Bangalore, 1908.



a. NEW ROOF OVER COURT T XX, TAKHT-I-BAHL.



b. GUXMANT MOSQUE AT GAUR, MALDA DISTRICT.

HASAN SUR SHAH'S TOMB, SASSARAM.



a. BEFORE REMOVAL OF MODERN HOUSES.



b. AFTER REMOVAL OF MODERN HOUSES AND CONSERVATION.



a. STUPA 3 AT SANCHI, BHOPAL STATE.



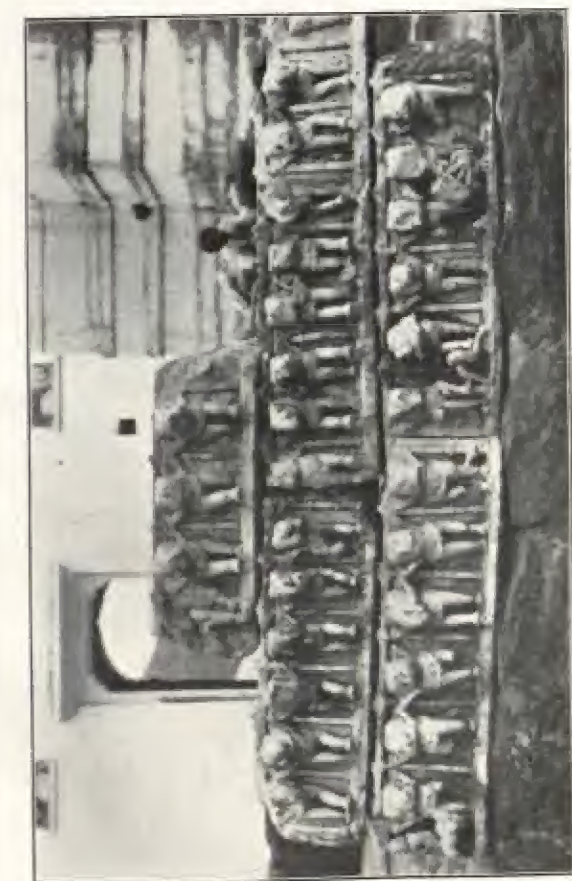
b. APSIDAL TEMPLE 18 AT SANCHI, BHOPAL STATE.



a. KANDARIA MAHADEVA TEMPLE, KHAJURAHO.



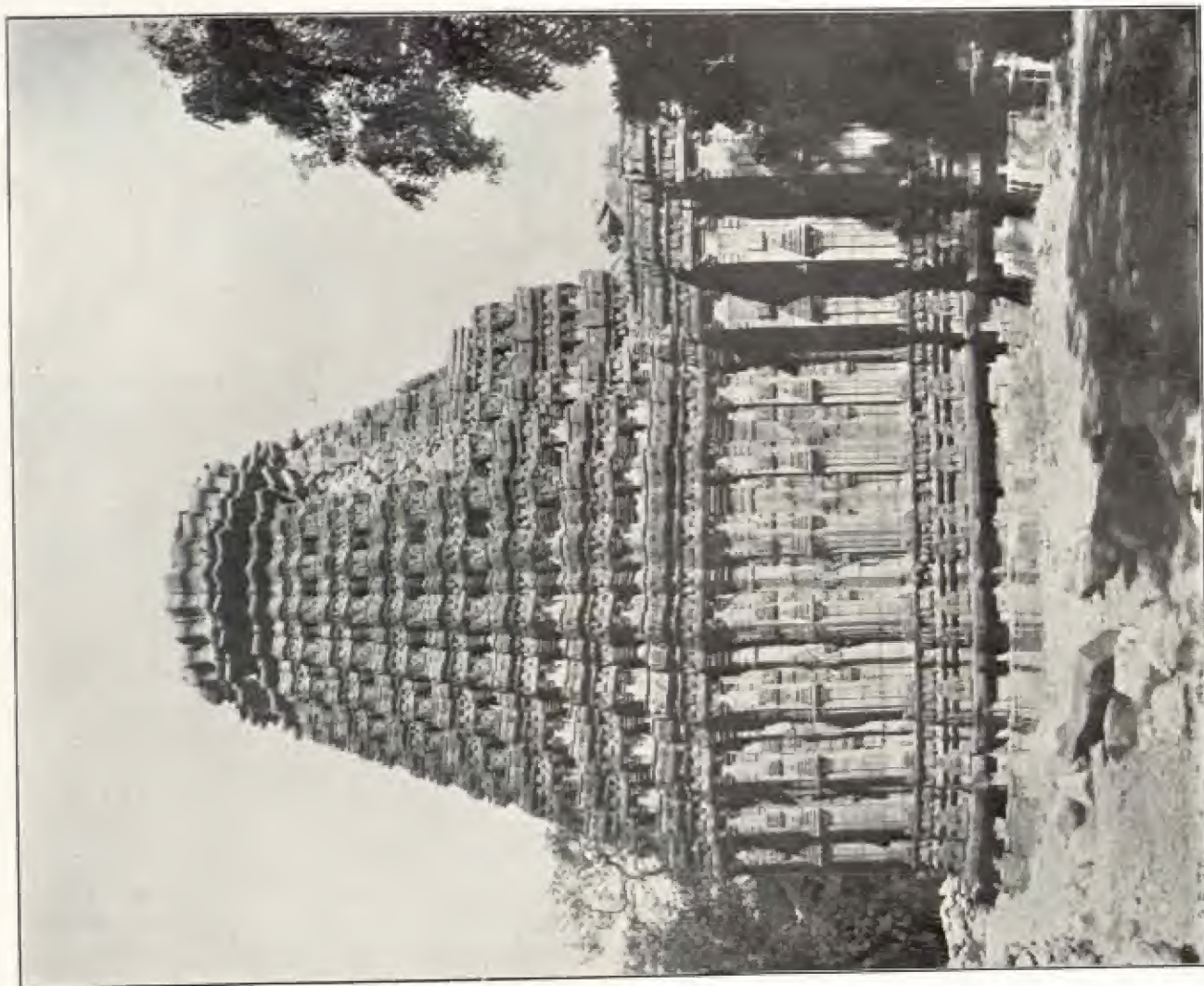
b. SURYANARAYANA TEMPLE, MODHERA.



a. DILWADA TEMPLE, MT. ABU: FRAGMENTS OF THE OLD HATHI
FRIEZES, DISMANTLED.



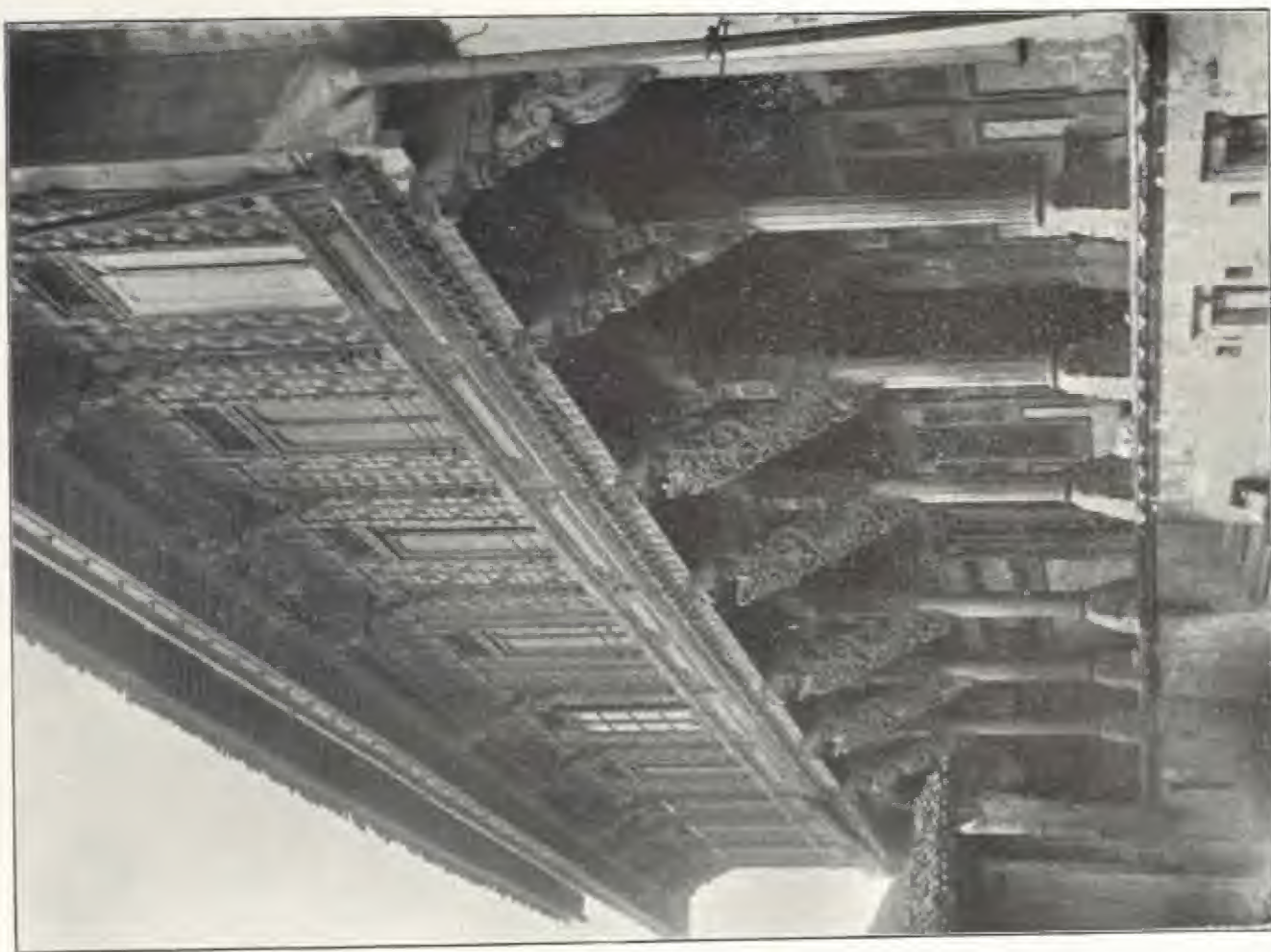
b. THE SAME: THE NEW FRIEZE AS RESTORED BY THE
TEMPLE AUTHORITIES.



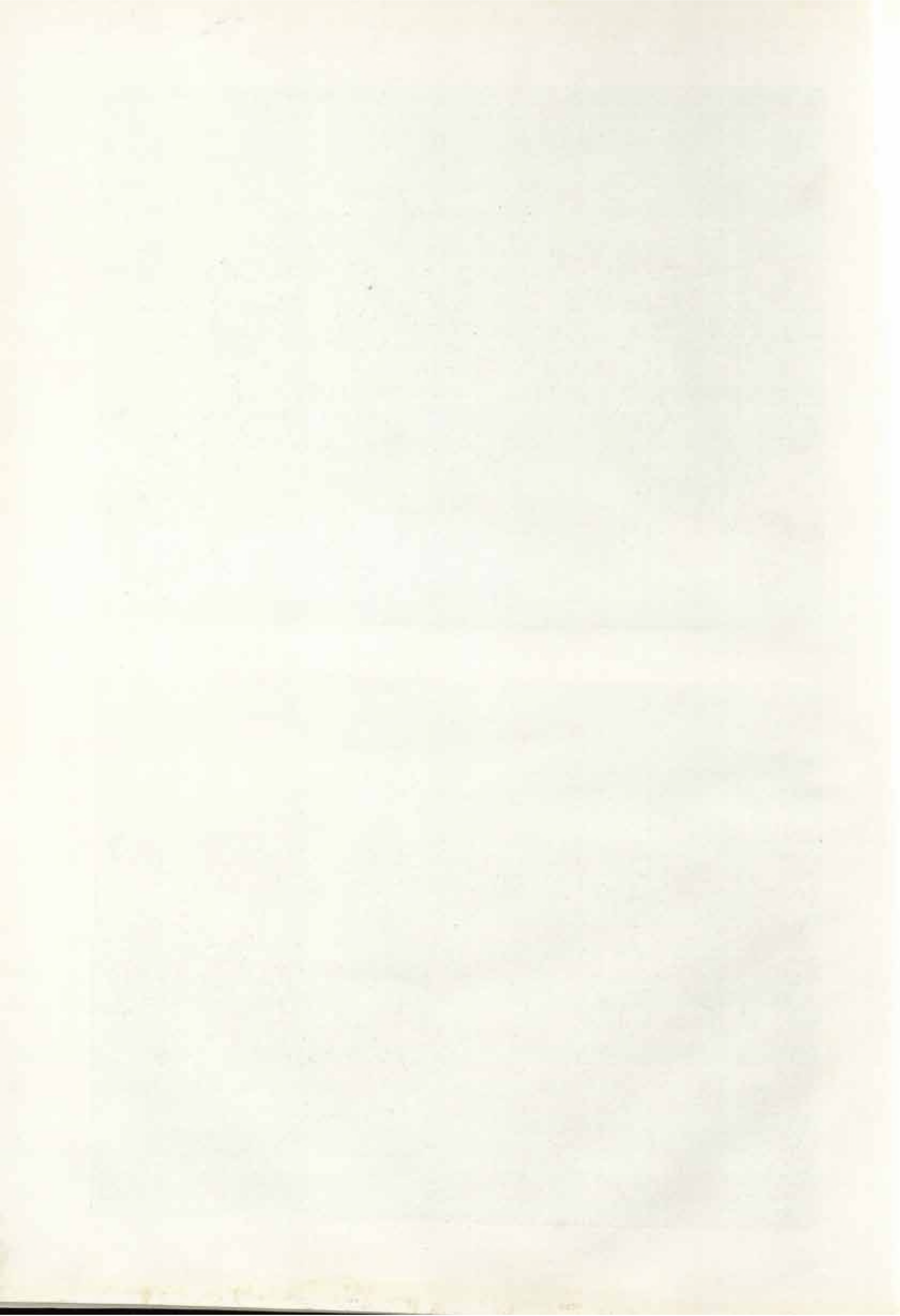
c. THE TEMPLE OF DODDA BASAPPA AT DAMBAL.



a. HOUSE OF ANANCHARAM GOKULDAS.



b. JAIN TEMPLE.





a TEMPLE AT ANWA.



b WATER DAM: NALDRUG FORT.



a. CARVINGS ON THE ROOFS OF THE MEDAW KYAUNG.



b. MYADAUNG KYAUNG OR QUEEN'S MONASTERY, MANDALAY.

EXCAVATIONS AT TAXILA.



a. THE STUPA OF KUNALA, BEFORE EXCAVATION.



b. THE STUPA OF KUNALA, AFTER EXCAVATION.

EXCAVATIONS AT TAXILA.



a



b



c



d

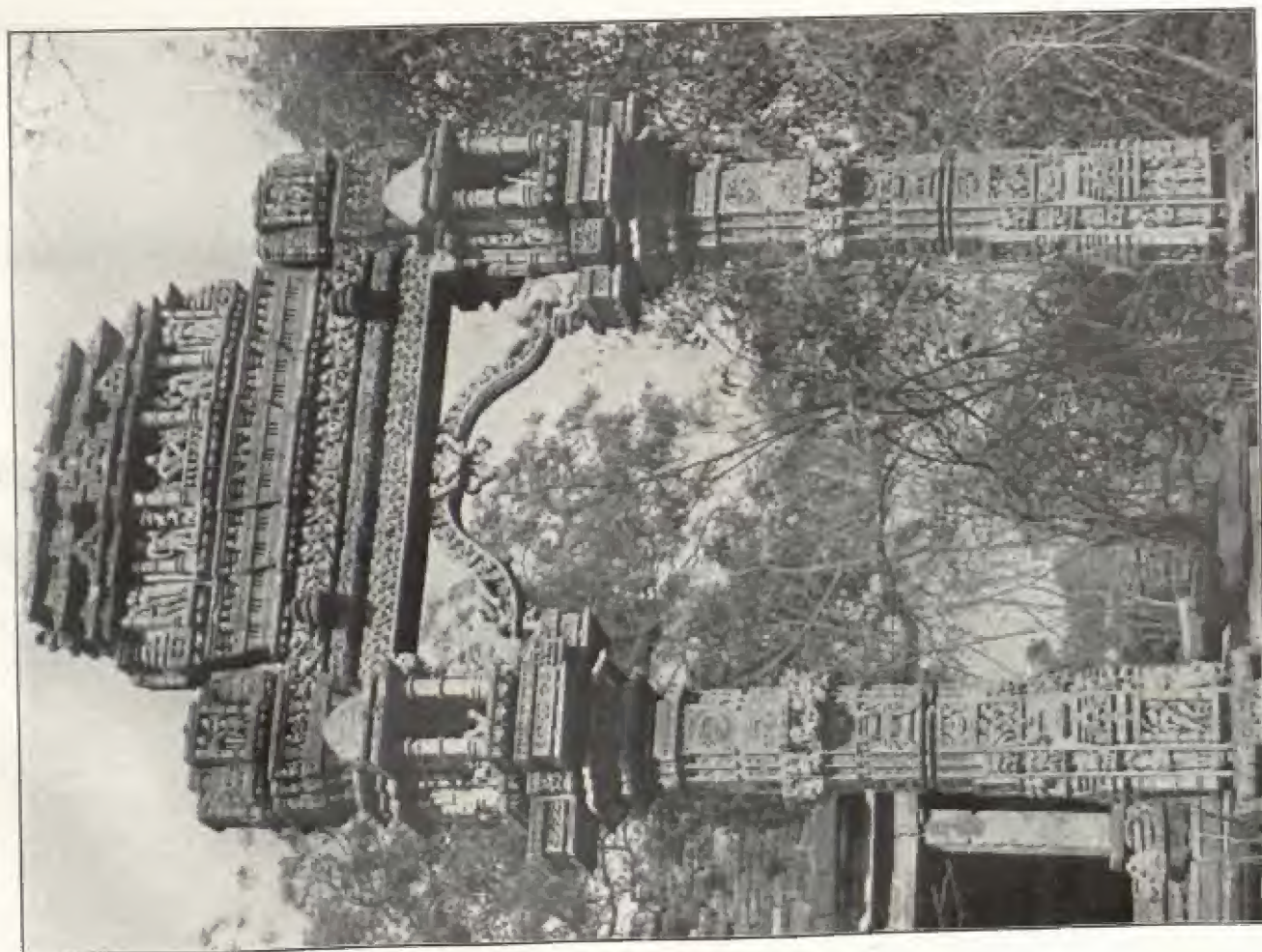
COPPER AND BRONZE VESSELS FROM SIKRAP.



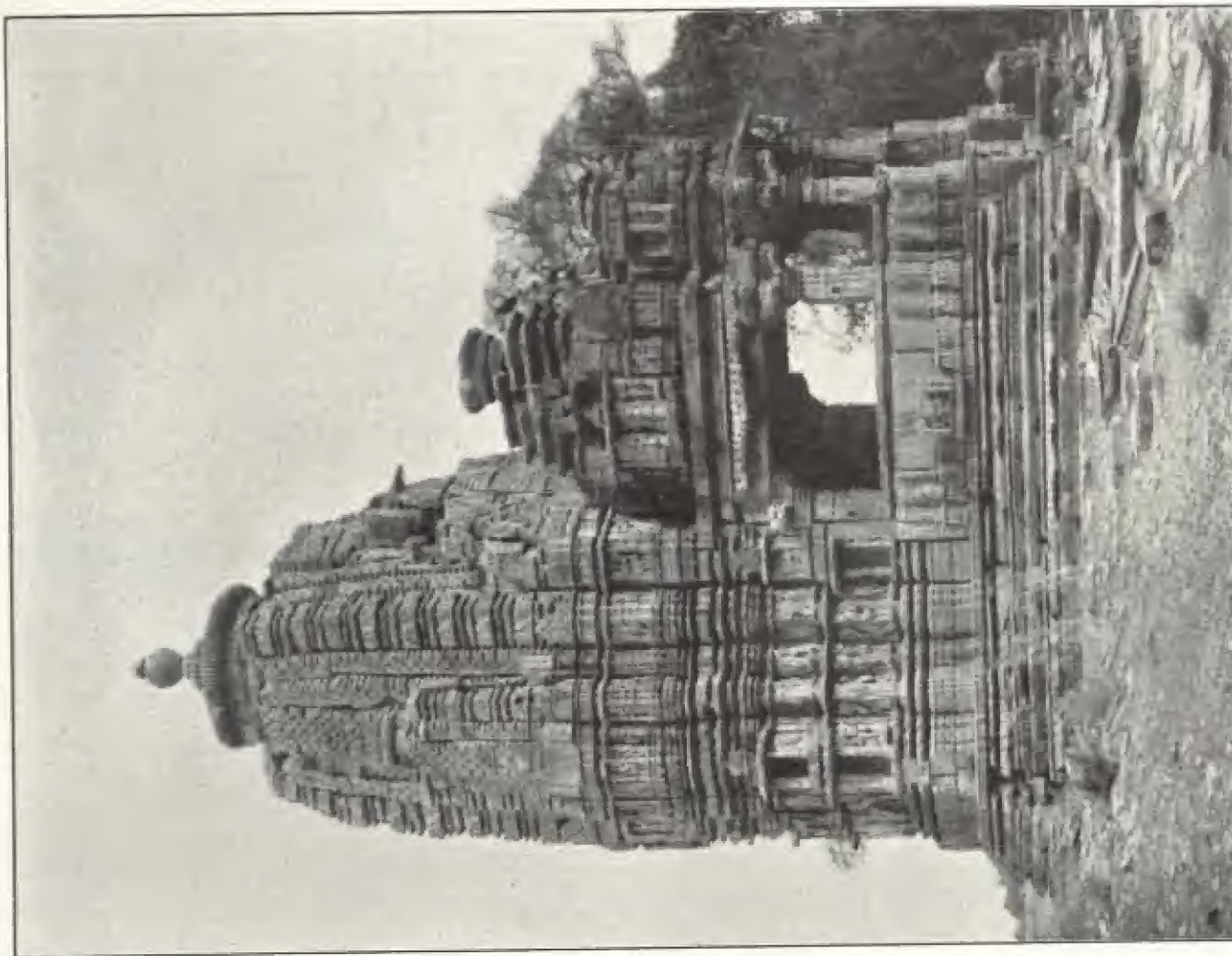
a. KOSHAK MAHAL AT FATEHABAD (CHANDERI), FROM NORTH-EAST.



b. MADRASSAH TOMB AT CHANDERI.



a. TORANA GATEWAY AT TERAHLI.



b. MAHADEVA TEMPLE (MUDRAVATA) AT KADWAHA.



a. MANIRHADRA IMAGE AT PAWAYA (PAWAIA)
FRONT VIEW.



b. MANIRHADRA IMAGE AT PAWAYA (PAWAIA)
BACK VIEW.



c. MONOLITHIC PALM-CAPITAL AT PAWAYA
(PAWAIA).



d. TRIMURTI IMAGE IN THE PESHAWAR MUSEUM.



a. MAIN BUILDING OF MONASTERY AT BANOD, FROM NORTH-WEST.



b. MONASTERY AT SURWAYA FROM NORTH-WEST.



a.



b.



c.



d.



e.



f.



g.



h.



i.



j.



k.



l.



m.



a. GENERAL VIEW OF A CAIRN AT GAJJALAKONDA.



b. SOUTH VIEW SHOWING ENTRANCE INTO CAIRN AT GAJJALAKONDA.





a.



b.



c.



d.



e.



f.



g.



h.

a. TERRACOTTA PLAQUE FROM AJAPALA PAGODA, PEGU. *b.* STONE SCULPTURE FROM TWANTE.
c, d. AND *e.* BRONZE IMAGES OF BUDDHA FOUND AT THE KYAUKTAGA GRANT IN PEGU DISTRICT. *f, g.* AND *h.* INSCRIBED TERRACOTTA TABLETS FOUND AT PAGAN.

NC

Central Archaeological Library,

NEW DELHI. 21722

Call No. R 912.02 / I.D. A/Ann

Author— *India department of
Arch.*

Title— *Annual Report of the
Arch. Survey of India
1914-15*

Borrower No. | Date of issue | Due date

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
GOVT. OF INDIA
Department of Archaeology
NEW DELHI.

Please help us to keep the book
clean and moving.

3, B-148, N. DELHI.